

**APPENDIX H**

**LOCAL STANDARDS JUSTIFICATION MATRICES**  
**(INDOOR AND OUTDOOR SPORTS)**

Setting Accessibility Standards

CURRENT POSITION										FUTURE VISION		CLIENT APPROVAL	LOCAL ACCESSIBILITY STANDARD
Facility Type	National Standards / Benchmarks	Existing Local Standards (includes any past surveys)	Active Places: Travel Time to facilities	Active Places: ONS Classification Reports	Active Places: % of Population with Facility Catchment	Consultation		User Expectations	PMP Recommendation	PMP Justification			
						User / Household Surveys	Other Consultation						
Swimming Pools	20 minute driveline	None				Overall 75% of respondents indicated that they would be willing to travel up to 15 minutes to a swimming pool and that the preferred mode of travel was by car. This view was common across seven of the eight analysis areas.			15 minute drive	The majority of people indicated that they would expect to travel by car. The 75% level for the City and District and across five of the eight analysis areas was a travel time of up to 15 minutes. Such a local standard would meet expectations within the City and District and across five of the eight analysis areas in which the 75% level was a drive time of up to 20 minutes. In addition, a 15-minute drivetime is within the accepted national standard.	✓	15 minute driveline	
Sports Halls	15 minute driveline	None				The general perception is that a travel time of 10 to 15 minutes is reasonable. A 15 minute travel time was found to be the 75% level overall and within four of the eight analysis areas. People in seven out of the eight analysis areas indicated that they would expect to travel by car. The only variance was found to exist in Area 1 where the 75% level was a 13.75 walk time.			15 minute drive	The majority of people indicated that they would expect to travel by car. A 15 minute travel time was found to be the 75% level overall and within four of the eight analysis areas. Such a local standard would meet expectations within the City and District and across five of the eight analysis areas in line with accepted national standards.	✓	15 minute driveline	
Health and Fitness	No national standards however industry guidelines suggests that people will travel between 8 and 12 minutes to a health and fitness facility	None				The general perception is that a travel time of up to 15 minutes is reasonable. A 15 minute travel time was found to be the 75% level overall and within five of the eight analysis areas. The preferred mode of transport was by car.			15 minute drive	The majority of people indicated that they would expect to travel by car. The 75% level for the City and District and across five of the eight analysis areas was a travel time of up to 20 minutes. Such a local standard would also meet expectations within one further analysis area in which the 75% level was a drive time of up to 20 minutes.	✗	10 minute driveline	
Indoor Bowls	15 minute driveline	None				Respondents indicated that a travel time of between 15 and 20 minutes was considered reasonable. Once again, people would expect to travel by car. The 75% level overall for the district was 20 minutes.			20 minute drive	The 75% level for the City and District overall and within three of the eight analysis areas was a travel time of up to 20 minutes. The 75% level in a further two analysis areas was only slightly lower at 17.5 minutes. Once again, people indicated that they would expect to travel by car.	✓	20 minute driveline	
Indoor Tennis	The National Tennis Facilities strategy (1998-2002) states that "the LTA will target suitable locations for both expansion of existing facilities and the building of indoor tennis centres within a 30 minute drive" suggesting that a 30 minute drivetime is an appropriate catchment	None				The majority of people indicated that a 15 to 20 minute travel time was reasonable. The 75% level for the district was 15 minutes. The preferred mode of transport was by car.			15 minute drive	The 75% level for the City and District overall and within four of the eight analysis areas was a travel time of up to 15 minutes. Once again, people also meet expectations within three of the four remaining analysis areas in which the 75% level was a drive time of up to 20 minutes. Overall, people indicated that they would expect to travel by car.	✗	20 minute driveline	
Community Centres/ Village Halls	No national standards	None				Respondents stated that they would expect to travel between 10 and 15 minutes by foot. The 75% level for the district and three out of the eight analysis areas was a 15 minute walk time. The majority of respondents of the eight analysis areas was a 10 minute walk time. However, the most commonly stated response was 15 minutes.			15 minute walk	The majority of people indicated that they would expect to walk to this type of facility. The 75% level for the district and three out of the eight analysis areas was a 15 minute walk time. The 75% level for five out of the eight analysis areas was a 10 minute walk time. However, the most commonly stated response was 15 minutes.	✓	15 minute walk time	

## PMP Definitions - Process by Typology

[illegible]

Setting Accessibility Standards

Typology	National Standards and/or Benchmarks	Existing Local Accessibility Standards (includes any past surveys)	Other Local Authorities Standards (by PMP)		Consultation	PMP Recommendation	PMP Justification	CLIENT APPROVAL	LOCAL ACCESSIBILITY STANDARD
District Park	No national standards	The local plan states that all residents should be within 2 miles of a district park. A district park is considered to be 20ha or above	LA Name	Local Standard Set	The general perception (75% of respondents) is that a 15 minute travel time by car is reasonable. Respondents from 4 of the eight analysis areas supported the overall view of residents of the district, indicating that they would expect to travel up to 15 minutes. Current behaviour contrasted slightly with this view, as 64% of those currently using district parks travel on foot but only 7% of users travel for longer than 20 minutes. Parish clerks indicated that a 10 minute drivetime was acceptable.	15 minute drive (6km)	The majority of people indicated a driving time rather than a walk time with the 75% level being up to 15 minutes. This reflects the notion that people are willing to travel further to reach target facilities. There are no national standards to provide a benchmark.	✓	15 minute drive (6km)
			Kirklees MC	10-15 min drive					
			Ellensmere Port & Nelson BC	10 min walk					
			Harborough DC	10 min (drive)					
			Vale Royal BC	15 min (drive)					
Local Park	No national standards	The local plan states that all residents should be within 0.75 miles of a local park. A local park is considered to be 2 - 20ha or above	Oswestry BC	15 min (walk)	Consultation indicated that local parks should be within closer proximity to residents. 75% indicated that they would be willing to travel up to 10 minutes to a local park and that the preferred means of reaching the destination would be on foot. This view was consistent across all analysis areas. 77% of current users of local parks travel on foot and 70% of people travel up to 10 minutes.	10 minute walk (0.8km)	75% of respondents in the district indicated that they would be willing to travel up to 10 minutes on foot. This was echoed unanimously across all eight analysis areas and matched current behaviour patterns. There are no national standards for comparison.	✓	10 minute walk (0.8km)
			Hallon BC	15 min (walk)					
			Knowlesley MBC	15 mins (walk)					
			Chelmsford BC	10 mins (drive)					
			Congleton BC	15 min & (walk) - Urban / 15 mins (drive) - Rural					
Small Local Park	No national standards	The local plan states that all residents should be within a 0.25 catchment of a small local park. A small local park is considered to be smaller than 2ha.	Maldstone BC	15-20 mins (walk)	75% of respondents indicated that they would be willing to travel up to 10 minutes and that the preferred mode of travel was on foot. This view was supported by respondents in 6 of the eight analysis areas. All current users of small parks are travelling on foot and all are travelling less than five minutes to their destination.	10 minute walk (0.8km)	Although current behaviour patterns indicate that residents currently travel only up to 5 minutes to reach a local park, 75% of respondents highlighted that they would be willing to travel up to 10 minutes on foot to reach a small local park and garden, the same distance people are willing to walk to local parks. This therefore suggests that a catchment of 10 minutes is appropriate for this type of open space.	✓	10 minute walk (0.8km)
			Burnley BC	15 minute (walk)					
			Tamworth BC	15 min (walk)					
			Kirklees MC	10 min (drive) - urban / 10 min (walk) - rural					
			Ellensmere Port & Nelson BC	15 min (drive) - urban / 10 min (walk) - rural					
Natural & Semi-Natural	English Nature Accessible Natural Greenspace Standard (ANGS) recommends at least 2 ha of accessible natural greenspace per 1,000 people based on no-one living more than: 300m from nearest natural greenspace / 2km from a site of 20ha / 5km from a site of 100ha / 10km from a site of 500ha	None	Harborough DC	20 min (walk)	75% of respondents in the district indicated that they would be willing to travel up to 15 minutes and that the preferred mode of transport was on foot. Opinions were split across analysis areas, with 75% of residents of five of the eight indicating that they would travel only up to 10 minutes. Perhaps unsurprisingly, residents in Harpenden and St Albans City Centre (i.e the more urban areas of the borough) suggested that they would be willing to travel up to 15 minutes. Parish clerks indicated that they would expect different standards for rural and urban areas, but would expect to walk up to 10 minutes in a rural area, 90% of those using natural spaces at present walk, and 60% travel up to 10 minutes and 90% up to 15 minutes. There are a number of strategic sites within the district to which people are likely to be willing to travel further, including Bricket Wood and Nomanland Commons.	10 minute walk - rural (0.8km) / 15 minute walk - urban (1.2km)	The majority of people indicated a walking time rather than a drive time with the 75% level being 15 minutes across the district. This recommended standard is in line with other standards set for local authorities although it appears that there is a division of opinion between the more rural and urban areas of the district, with people living in the urban areas willing to travel further to reach natural and semi natural open space sites. A separate standard should therefore be considered and it is recommended that due to the variation in the environment and expectations, residents in the city should expect to walk up to 15 minutes to reach natural open space, compared to 10 minutes in a rural area. 90% of those who use these spaces most frequently actually walk to them and the suggested standards therefore mirror current behaviour.	✓	10 minute walk - rural (0.8km) / 15 minute walk - urban (1.2km)
			Vale Royal BC	15 min (walk)					
			Oswestry BC	15 minute (walk)					
			Burnley BC	15-20 min (walk)					
			Tamworth BC	5 min (walk)					
Amenity Greenspace	No national standards	None	Ellensmere Port & Nelson BC	5 min (walk)	The majority of residents indicated that they expected to walk to amenity green space. 75% of respondents in the district suggested that they would be willing to walk up to 10 minutes, and this opinion was reflected across the district, with 75% of respondents of each analysis area willing to walk this far. It must be noted however that although the 75% mark is 10 minutes, the modal answer was 5 minutes. This echoes the views of parish clerks, although it was stated that the quality of the amenity green space was a particular determining factor. Current behaviour suggests that 75% travel up to 5 minutes on foot.	5 minute walk (0.4km)	The national standard relates to greenspace in general and not specifically this typology as per PPG 17. Sites of strategic importance and specific interest should be considered to be special cases with catchments as wide as a 15 minute drivetime.	✓	5 minute walk (0.4km)
			Harborough DC	10 min (walk)					
			Vale Royal BC	10 min (walk)					
			Oswestry BC	10 min (walk)					
			Hallon BC	5 min (walk)					

Neighbourhood Play Area	(3) NEAPs aged min 8 : min area size 1000msq ; should be located 1,000 metres or 15 minutes walking time along pedestrian routes (600 metres in a straight line).	The local plan states that children's play areas should be within a 400m catchment of residents and toddlers play areas should be within a 200m walk. This equates to approximately a five minute walk for children's play areas	Kirklees MC	5-10 min walk	75% of respondents across the district indicated that they would be willing to travel up to 10 minutes on foot to reach a neighbourhood play area. This view was echoed across all analysis areas.	10 minute walk (0.8km)	✓	10 minute walk (0.8km)
			Ellesmere Port & Neston BC	5-10 min (walk)				
			Harborough DC	5-10 min (walk)				
			Vale Royal BC	10 min (walk)				
			Gwastrey BC	10 min (walk)				
Large Local Play Area	(2) LEAPs - aged min 5 : min area size 400msq ; should be located 400 metres or 5 minutes walking time along pedestrian routes (240 metres in a straight line)		Halton BC	10 min (walk)	As with neighbourhood play areas, 75% of respondents across the district indicated that they would be willing to travel up to 10 minutes on foot to reach a large local play area. This view was not quite as consistent across all analysis areas.	10 minute walk (0.8km)	✓	10 minute walk (0.8km)
			Knowsley MBC	10 mins (walk)				
			Chelmsford BC	5-10 mins (walk)				
			Congleton BC	10 mins (walk) - Children / young people				
			Maldstone BC	10-15 mins (walk)				
Small Local Play Area	(1) LAPs - aged 4-6 : 1 min walk or 100m (60m in a straight line) ; min area size 100msq ; LAPs typically have no play equipment and therefore could be considered as amenity greenspace		Burnley BC	10 minute (walk)	The view that 10 minutes on foot is an appropriate catchment was again echoed by 75% of respondents. The modal answer was however 5 minutes, indicating that more people felt that 5 minutes was an appropriate travel distance and figures may potentially be skewed by extreme answers. A five minute catchment distance on foot reflects views portrayed in other consultation and by their very nature, small facilities should be more localised.	5 minute walk (0.4km)	✓	5 minute walk (0.4km)
			Tamworth BC	10 min (walk)				
			Kirklees MC	10-15 min (drive) - urban / 15-20 min (drive) - rural				
			Ellesmere Port & Neston BC	15 min (drive) - urban / 20 min (drive) - rural				
			Harborough DC	10 min (drive)				
Outdoor Sports Facilities	No national standards	NONE	Vale Royal BC	10-15 min (drive)	Travel by car was the preferred method of transport to reach outdoor sports facilities although relatively high numbers also indicated that they would travel on foot. A higher proportion of residents of Sandridge, London Colney and St Albans City indicated that they would travel on foot, perhaps reflecting the abundance of sports facilities located in these areas. 78% of current users of outdoor sports facilities however travel by car, with 78% travelling up to 15 minutes, 38% of whom travel between 10 and 15 minutes. 75% of respondents across the district indicated that they would be willing to travel up to 15 minutes by car, a view which was echoed by 75% of residents in 4 individual analysis areas.	15 minute drive (6 km)	✓	15 minute drive (6km)
			Gwastrey BC	15 min (drive)				
			Halton BC	15 mins (walk)				
			Knowsley MBC	15 mins (drive)				
			Chelmsford BC	10-15 mins (drive)				
Allotments	No national standards	NONE	Congleton BC	10-20 min (drive)				
			Burnley BC	10-15 minute drive				
			Maldstone BC	10-15 mins (walk)				
			Tamworth BC	15 min (drive)				
			Kirklees MC	10-15 min (drive)				
			Ellesmere Port & Neston BC	10-15 min (drive)				
			Harborough DC	10 min (drive)				
			Vale Royal BC	15 min (drive)	Of those people who use allotments most frequently 74% currently travel on foot, and all those who walk reach their destination within 10 minutes. Over 75% of respondents in the district said that they would be willing to travel an allotment within a 15 minute walking distance. Views on appropriate catchments varied between analysis areas, with 75% of respondents in the four analysis areas, indicating that a 10 minute walk was appropriate. 75% of respondents in 3 areas suggesting that a 15 minute walk was appropriate, and 75% of respondents in Colney Heath feeling a 20 minute walk was appropriate. Parish clerks indicated that a 10 minute drive would be appropriate.	15 minute walk (1.2km)	✓	15 minute walk (1.2km)
			Gwastrey BC	15 min (walk)				
			Halton BC	20 mins (walk)				
Cemeteries / Churchyards	No national standards	As per PPG 17, no realistic requirement to set catchments for such typology as cannot be easily influenced through planning policy and implementation	Knowsley MBC	20 mins (walk)				
			Chelmsford BC	10 mins (drive)				
			Burnley BC	15 minute (walk)				
			Congleton BC	15 mins (walk) - Urban / 15 mins (drive) - Rural				
			Tamworth BC	15 min (walk)				
Green Corridors	No national standards	As per PPG 17, no realistic requirement to set catchments for such typology as cannot be easily influenced through planning policy and implementation						

# Setting Accessibility Standards (table definitions)

Field	Comment
Typology	PPG 17 Typology
National Standards and/or Benchmarks	Details of any existing national standards for each typology usually provided by national organisations e.g. English Nature make recommendations of access for 'Natural Greenspace'
Existing Local Accessibility Standards (includes any past surveys)	There maybe some existing local standards that will need to be taken into account and used as a guidance benchmark when setting new local standards
Other Local Authorities Standards (by PMP)	These are figures detailing other local standards set by PMP within other green space and open space projects and provide another comparison benchmark when setting local standards for other Local Authorities.
Consultation (Household Survey - establish 75% threshold catchments)	Some statistical information that will come from the household questionnaire - need to take the 75% level as recommended by PPG 17 Companion Guide (ie from a list of responses - what is the time 75% are willing to travel)
PMP Recommendation	PMP recommendation of a local standard for discussion and approval by the client - standard should be in time and/or distance
PMP Justification	PMP reasoning and justification for the locals standard that has been recommended
CLIENT APPROVAL	Client to approve local standard before analysis undertaken - any changes in standards at a later date during the project will impact on re-doing calculations, analysis and report - the standards drive the analysis
LOCAL QUANTITY STANDARD	Final Local Standard agreed and approved that will be stated in the report and used for analysis purposes - standard should be in time and/or distance

Setting Quantity Standards

Typology	Natural Standards	Natural Standards (adjustments and distribution)	Current 1,000 people (no adjustment)	Existing Local Standards	Local Standard Set	Classification (enough / about right / not enough)	Other Consideration	PMP Recommendation (1,000 population)	PMP Justification	CURR APPROVAL	LOCAL STANDARD
District Park	No natural standards	No natural standards	0.42	No standard is current	Ardenwood LAC	0.42 (enough) (1.0 per)	A report satisfaction survey completed by residents are satisfied with the current provision of parks in garden.	0.42	Overall state on reports that current provision of district parks is about right. 40% of residents on average recommend more parks and districts are 47% who are recommending more community areas (60% in all age population areas). There are two parks in the area and one is a small park. In this area, we recommend a local standard of 1.0 per 1,000 population.	✓	0.42
					Neighborhood DC	0.26 (enough) (1.0 per)	5% more than enough				
					Neighborhood DC	0.26 (enough) (1.0 per)	5% more than enough				
					Neighborhood DC	0.26 (enough) (1.0 per)	5% more than enough				
Local Park	No natural standards	No natural standards	0.3	No standard is current	Ardenwood LAC	0.3 (enough) (1.0 per)	A report satisfaction survey completed by residents are satisfied with the current provision of parks in garden.	0.3	Overall state on reports that current provision of district parks is about right. 40% of residents on average recommend more parks and districts are 47% who are recommending more community areas (60% in all age population areas). There are two parks in the area and one is a small park. In this area, we recommend a local standard of 1.0 per 1,000 population.	✓	0.3
					Neighborhood DC	0.26 (enough) (1.0 per)	5% more than enough				
					Neighborhood DC	0.26 (enough) (1.0 per)	5% more than enough				
					Neighborhood DC	0.26 (enough) (1.0 per)	5% more than enough				
Small Local Park	No natural standards	No natural standards	0.02	No standard is current	Ardenwood LAC	0.02 (enough) (1.0 per)	A report satisfaction survey completed by residents are satisfied with the current provision of parks in garden.		Overall state on reports that current provision of district parks is about right. 40% of residents on average recommend more parks and districts are 47% who are recommending more community areas (60% in all age population areas). There are two parks in the area and one is a small park. In this area, we recommend a local standard of 1.0 per 1,000 population.		
					Neighborhood DC	0.26 (enough) (1.0 per)	5% more than enough				
					Neighborhood DC	0.26 (enough) (1.0 per)	5% more than enough				
					Neighborhood DC	0.26 (enough) (1.0 per)	5% more than enough				
Natural & Semi-Natural	No natural standards	No natural standards	1.25 (enough) (1.0 per)	None	Ardenwood LAC	1.25 (enough) (1.0 per)	A report satisfaction survey completed by residents are satisfied with the current provision of parks in garden.	2.26 (enough) (1.0 per)	Overall state on reports that current provision of district parks is about right. 40% of residents on average recommend more parks and districts are 47% who are recommending more community areas (60% in all age population areas). There are two parks in the area and one is a small park. In this area, we recommend a local standard of 1.0 per 1,000 population.	✓	2.26 (enough) (1.0 per)
					Neighborhood DC	0.26 (enough) (1.0 per)	5% more than enough				
					Neighborhood DC	0.26 (enough) (1.0 per)	5% more than enough				
					Neighborhood DC	0.26 (enough) (1.0 per)	5% more than enough				
Amenity Greenspace	No natural standards	No natural standards	1.13	None	Ardenwood LAC	1.13 (enough) (1.0 per)	A report satisfaction survey completed by residents are satisfied with the current provision of parks in garden.	1.24	Overall state on reports that current provision of district parks is about right. 40% of residents on average recommend more parks and districts are 47% who are recommending more community areas (60% in all age population areas). There are two parks in the area and one is a small park. In this area, we recommend a local standard of 1.0 per 1,000 population.	✓	1.24
					Neighborhood DC	0.26 (enough) (1.0 per)	5% more than enough				
					Neighborhood DC	0.26 (enough) (1.0 per)	5% more than enough				
					Neighborhood DC	0.26 (enough) (1.0 per)	5% more than enough				

[illegible]



Setting Quantity Standards (table definition)

Field
Typology
National Standards
National Standards (advantages & disadvantages)
Current Provision (per 1,000 population)
Existing Local Standards
Other Local Authority Actuals and Standards
Consultation (too much / about right / not enough)
Consultation Comments (Quantity)
Other Consultation (summary)
PMP Recommendation
PMP Justification
CLIENT APPROVAL
LOCAL QUANTITY STANDARD

tions)

Comment	
PPG 17 Typology	
Details of any existing national standards for each typology usually provided by national organisations e.g. National Playingh Fields Association for playing pitches	
Information on the advantages and disadvantages of using national standards and their relevance given the new PPG 17 guidance supports the setting of local standards to meet local needs. These advantages and disadvantages will need to be taken into account when using national standards as a benchmark for setting local standards.	
This is the current provision in hectares per 1,000 population within the Local Authority area	
There may be some existing local standards that will need to be taken into account and used as a guidance benchmark when setting new local standards	
These are figures detailing actual provision and local standards set by PMP within other green space and open space projects and provide another comparison benchmark when setting local standards for other Local Authorities.	
Some statistical information that will come from the household questionnaire and needs to be applied and reported per analysis area to provide some detailed local analysis.	
A summary of reasons behind people's choices of whether they feel there is enough provision in some areas. PPG 17 indicates that where local provision is regarded as inadequate it is important to establish why this is the case. The feeling of deficiency can sometimes be due to qualitative issues of existing open space sites rather than actual quantity issues.	
Any other qualitative consultation / information that has been extracted on local needs in terms of quantity of provision e.g. from neighbourhood drop-in sessions and local strategic documents	
PMP recommendation of a local standard for discussion and approval by the client - standard should be in hectares per 1,000 population	
PMP reasoning and justification for the local standard that has been recommended	
Client to approve local standard before analysis undertaken - any changes in standards at a later date during the project will impact on re-doing calculations, analysis and report - the standards drive the analysis	
Final Local Standard agreed and approved that will be stated in the report and used for analysis purposes - standard should be in hectares per 1,000 population	

## PMP Definitions - Process by Typology

[illegible]

**APPENDIX I**

**DEMAND MODELLING CALCULATIONS AND  
ASSUMPTIONS**

## Demographic Profile - 2001 Census



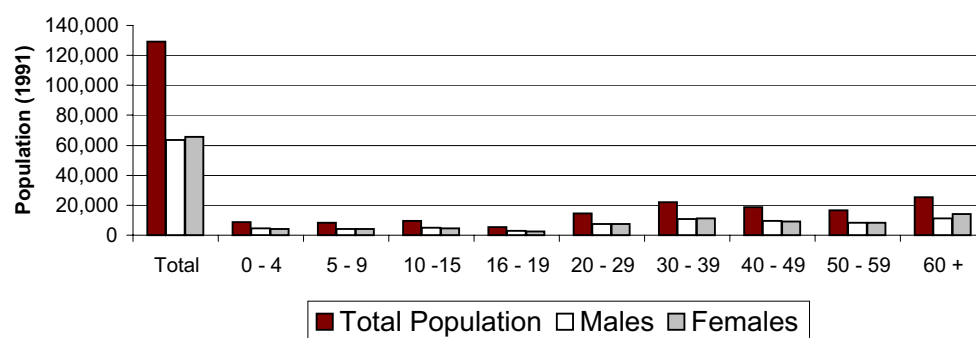
Report for : PMP  
 Defined Area: St Albans District  
 Postcode: N/A

	Results from area	Results as % of area	Results as % of England & Wales	Results as % of GB	From GB % Index (ave. =100)	Index difference	From England & Wales % Index (ave. =100)	Index difference
<b>Total Population</b>	129,126	100	100.0	100	100	0	100	0
0 - 4	8,717	6.8	6.0	5.7	118	18	113	13
5 - 9	8,321	6.4	6.4	6.2	104	4	101	1
10 -15	9,544	7.4	7.8	7.8	95	-5	94	-6
16 - 19	5,486	4.2	4.9	4.9	86	-14	87	-13
20 - 29	14,655	11.3	12.7	12.6	90	-10	90	-10
30 - 39	22,000	17.0	15.6	15.6	110	10	109	9
40 - 49	18,608	14.4	13.4	13.8	105	5	108	8
50 - 59	16,652	12.9	12.6	12.6	102	2	103	3
60 +	25,143	19.5	20.8	20.9	93	-7	94	-6
<b>Males</b>								
Total	63,540	49.2	48.7	48.4	102	2	101	1
0 - 4	4,458	3.5	3.0	2.9	118	18	113	13
5 - 9	4,169	3.2	3.3	3.2	102	2	99	-1
10 -15	4,856	3.8	4.0	4.0	95	-5	94	-6
16 - 19	2,811	2.2	2.5	2.5	87	-13	87	-13
20 - 29	7,366	5.7	6.3	6.2	92	-8	91	-9
30 - 39	10,986	8.5	7.7	7.6	112	12	111	11
40 - 49	9,377	7.3	6.6	6.8	107	7	109	9
50 - 59	8,326	6.4	6.2	6.2	104	4	104	4
60 +	11,191	8.7	9.1	9.0	96	-4	96	-4
<b>Females</b>								
Total	65,586	50.8	51.3	51.6	98	-2	99	-1
0 - 4	4,259	3.3	2.9	2.8	118	18	113	13
5 - 9	4,152	3.2	3.1	3.0	106	6	104	4
10 -15	4,688	3.6	3.8	3.8	96	-4	95	-5
16 - 19	2,675	2.1	2.4	2.4	85	-15	86	-14
20 - 29	7,289	5.6	6.4	6.4	89	-11	88	-12
30 - 39	11,014	8.5	7.9	8.0	107	7	108	8
40 - 49	9,231	7.1	6.7	7.0	103	3	106	6
50 - 59	8,326	6.4	6.3	6.4	101	1	102	2
60 +	13,952	10.8	11.7	11.9	91	-9	92	-8
<b>Ethnic Origin</b>								
All White	120,068	93.0	90.9	0.0	N/A	N/A	102	2
White - British	112,047	86.8	87.0	0.0	N/A	N/A	100	-0
White - Irish	2,536	2.0	1.3	0.0	N/A	N/A	155	55
White - Other	5,485	4.2	2.7	0.0	N/A	N/A	160	60
All Black	1,288	1.0	2.3	0.0	N/A	N/A	43	-57
Black - Caribbean	818	0.6	1.1	0.0	N/A	N/A	55	-45
Black - African	352	0.3	1.0	0.0	N/A	N/A	28	-72
Black - Other	118	0.1	0.2	0.0	N/A	N/A	47	-53
Chinese	675	0.5	0.4	0.0	N/A	N/A	116	16

	Results from area	Results as % of area	Results as % of England & Wales	Results as % of GB	From GB % Index (ave. =100)	Index difference	From England & Wales % Index (ave. =100)	Index difference
<b>Ethnic Origin contd</b>								
All Asian	4,208	3.3	4.6	0.0	N/A	N/A	71	-29
Asian - Indian	1,129	0.9	2.1	0.0	N/A	N/A	42	-58
Asian - Pakistani	695	0.5	1.4	0.0	N/A	N/A	37	-63
Asian - Bangladeshi	1,615	1.3	0.6	0.0	N/A	N/A	223	123
Asian - Other	769	0.6	0.5	0.0	N/A	N/A	123	23
Others	593	0.5	0.4	0.0	N/A	N/A	105	5
All Mixed	2,020	1.6	1.3	0.0	N/A	N/A	119	19
White and Black Caribbean	559	0.4	0.5	0.0	N/A	N/A	92	-8
White and Black African	186	0.1	0.2	0.0	N/A	N/A	92	-8
Mixed - White and Asian	694	0.5	0.4	0.0	N/A	N/A	143	43
Mixed - Others	581	0.4	0.3	0.0	N/A	N/A	146	46
<b>Residents who have a limiting long-term illness</b>	15,843	12.3	17.0	17.5	70	-30	72	-28
<b>Economic Activity of Household Residents (aged 16 and over)</b>								
Total	105,641	[total of all economic sub-types]						
In Full-time employment	50,318	47.6	39.0	40.5	118	18	122	22
In Part-time employment	15,420	14.6	12.8	13.1	111	11	114	14
Self employed	9,682	9.2	5.2	5.7	162	62	175	75
Unemployed	1,600	1.5	2.5	3.0	50	-50	61	-39
Students	5,658	5.4	18.3	12.5	43	-57	29	-71
Permanently Sick/Disabled	2,615	2.5	4.3	5.6	44	-56	57	-43
Retired	12,167	11.5	9.9	11.3	102	2	116	16
Other inactive	1,971	1.9	2.5	3.1	61	-39	73	-27
Looking after home/family	6,210	5.9	5.3	5.2	113	13	110	10
<b>Males</b>								
In Full-time employment	32,906	31.1	25.3	26.0	120	20	123	23
In Part-time employment	3,447	3.3	2.7	2.7	121	21	121	21
Self employed	6,834	6.5	3.8	4.1	158	58	170	70
Unemployed	965	0.9	1.5	1.9	47	-53	61	-39
Students	2,612	2.5	9.2	6.1	40	-60	27	-73
Permanently Sick/Disabled	1,319	1.2	2.4	3.0	42	-58	53	-47
Retired	5,336	5.1	4.0	4.5	111	11	126	26
Other inactive	869	0.8	1.1	1.3	62	-38	75	-25
Looking after home/family	260	0.2	0.4	0.4	63	-37	67	-33
<b>Female</b>								
In Full-time employment	17,412	16.5	13.7	14.5	113	13	120	20
In Part-time employment	11,973	11.3	10.1	10.5	108	8	113	13
Self employed	2,848	2.7	1.5	1.6	171	71	179	79
Unemployed	635	0.6	1.0	1.1	54	-46	62	-38
Students	3,046	2.9	9.4	6.5	44	-56	31	-69
Permanently Sick/Disabled	1,296	1.2	2.0	2.6	47	-53	62	-38
Retired	6,831	6.5	6.2	6.9	93	-7	104	4
Other inactive	1,102	1.0	1.4	1.7	60	-40	72	-28
Looking after home/family	5,950	5.6	5.0	4.8	117	17	113	13
<b>Lone Parents</b>								
Total	102,544	[Total of All People aged 16+]						
Male	4,124	4.0	5.6	6.0	67	-33	71	-29
Female	656	0.6	0.8	0.8	80	-20	82	-18
	3,468	3.4	4.9	5.2	65	-35	69	-31

	Results from area	Results as % of area	Results as % of England & Wales	Results as % of GB	From GB % Index (ave. =100)	Index difference	From England & Wales % Index (ave. =100)	Index difference
<b>Tenure of Households</b>								
<b>Total Occupied Household Spaces</b>	52,690							
Owned	40,584	77.0	68.7	65.7	117	17	112	12
Private Rented or Living Rent Free	5,498	10.4	12.0	11.2	94	-6	87	-13
Rented from Council	5,272	10.0	13.2	17.4	58	-42	76	-24
Other Social Rented	1,336	2.5	6.1	5.8	44	-56	42	-58
<b>Car Availability by Household</b>								
with no car	7,862	14.9	26.8	30.5	49	-51	56	-44
with 1 car	22,367	42.5	43.7	43.5	98	-2	97	-3
with 2 cars	22,503	42.7	29.5	26.0	165	65	145	45
<b>Social Class of Head of Household</b>								
<b>Total Head of Household (aged 16+)</b>	100,931							
AB - Higher & Intermediate managerial/admin/professional	40,014	39.6	22.2	20.6	193	93	179	79
Supervisory, clerical, junior C2 - Skilled manual workers	31,162	30.9	29.7	28.1	110	10	104	4
D - Semi-skilled & unskilled manual workers	8,966	8.9	15.1	14.8	60	-40	59	-41
E - On state benefit, unemployed, lowest grade	9,669	9.6	17.0	17.3	55	-45	56	-44
	11,120	11.0	16.0	19.2	57	-43	69	-31

Graph to illustrate population by age and gender.



## Population Projection Report

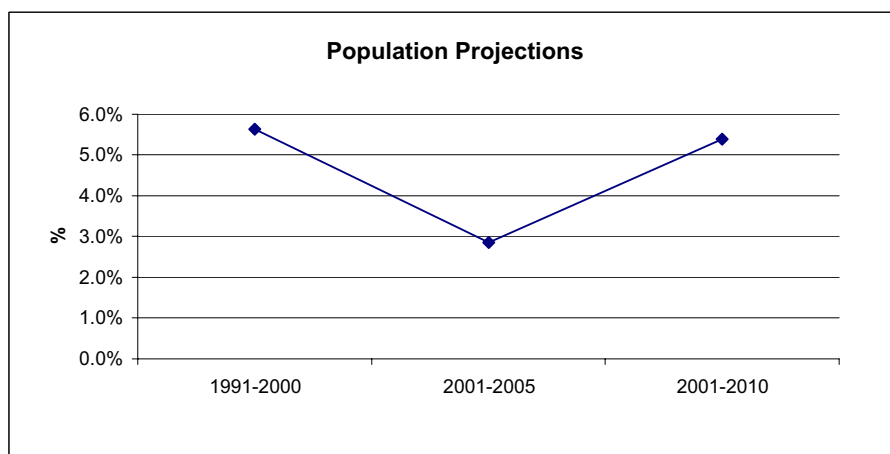


**Report for :** PMP  
**Defined Area:** St Albans District  
**Postcode** N/A

### Data Table:

	Population
1991	121,842
2001	129,126
2005	132,822
2010	136,083

Population Projections	1991-2000	2001-2005	2001-2010
St Albans District	5.6%	2.9%	5.4%
Actual Total Change	7,284	3,696	6,957



Source: 1996 Sub-National Projections. Reproduced by permission of the Office of National Statistics.  
© Crown Copyright

© Mapping the Future™

Note: Some variations may occur in projections due to the changes in postal geography.



## MtF Demand Model - Swimming Pools - PART A - DEMAND SIDE

Target Area: **St Albans District**

Target Site: **N/A**

Any model is based on a number of assumptions. The assumptions used in this model are as follows:

### Assumptions/Parameters used in Model

Source: 2004 Sport England

- ☐ Proportion of visits during peak times = 63%
- ☐ Average duration of visit = 64 minutes (lank), 68 minutes (leisure pool)
- ☐ Normal peak periods = 52 hours per week = 49 peak sessions
- ☐ At one time capacity = 6m<sup>2</sup> per person
- ☐ A one time capacity is defined as the supply/capacity of one m<sup>2</sup> of pool area at any one time
- ☐ Capacity per 212m<sup>2</sup> (1 pool unit) = 35 people. (number of metres squared divided by the at one time capacity of one m<sup>2</sup>)
- ☐ A pool unit is defined as an average four lane, 25 metre pool.

These assumptions are then applied to the population (classified by age and gender) of the target area. Calculated Sport England demand parameters for each category of age and gender are also applied (see the following table).

### Demand Assessment Table

Demand in relation to the age and gender profile of the target area is calculated by applying the Sport England parameters to it.

Age group	Population		Rate of participation (%)		Participation numbers		Frequency of participation (per week)		Visits per week		Peak visits (63%)	Comfort Capacity (70%)
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		
0-15	13,483	13,099	13.23	12.72	1784	1666	0.92	0.95	1641	1583	2031	2902
16-24	5,911	5,681	10.86	14.51	642	824	0.84	0.76	539	626	734	1049
25-39	15,252	15,297	13.73	18.89	2094	2890	0.71	0.79	1487	2283	2375	3393
40-59	17,703	17,557	8.13	10.44	1439	1833	0.94	0.81	1353	1485	1788	2554
60-79	9,578	10,685	3.93	4.52	376	483	1.18	1.07	444	517	605	865
Total	61,927	62,319			6,336	7,696			5,464	6,494	7,533	10,762

### Quantifying Demand

The figure of total visits during peak times is used to calculate the size of a swimming pool needed to serve this demand at any one time.

This is calculated by:

- ☐ dividing the total peak visits by the number of peak sessions(49)
- ☐ divide by the water area required by one person (6m<sup>2</sup> of pool area).

This leaves one number signifying the total demand from the catchment area, measured in square metres of pool.

Standard
220
6
1378

### Standard

**Water area required to meet potential demand/m<sup>2</sup>, in 2001 :** **1318** m<sup>2</sup>

The corresponding demand in 2005 will be : **1356** m<sup>2</sup>

The corresponding demand in 2010 will be : **1389** m<sup>2</sup>

**Pool Units Required in 2001:** **6.2**

**Pool Units Required in 2005:** **6.4**

**Pool Units Required in 2010:** **6.6**

A pool unit is equal to: 212 m<sup>2</sup> or a 4 lane 25 metre pool

*Note: Demand will change over time in relation to the increase or decrease in resident population.*

Demand Sensitivities

The model calculates the total potential demand for swimming and assumes that each pool will operate on average at 70% peak time capacity to provide comfort for users. Once this 70% capacity has been exceeded it assumes that people will choose not to use the pool and either find an alternative pool or not go swimming.

A number of sensitivities have been calculated:

**Capacity** - this is the theoretical pool area to meet the demand for swimming based on current participation rates with the pool operating at capacity during peak times  
This does not allow for the comfort factor (this is the basis on which previous models (FPM and MIF) have been calculated)

**Standard** - this identifies the potential demand for swimming provision and assumes that all barriers to participation are removed. This includes an allowance for a comfort factor and equates to the Sport England Facility Calculator

**Game Plan** - this assumes that the targets in Game Plan are achieved (50% participation in 2010 and 70% in 2020) with swimming increasing proportionately to the increase in participation. This allows for the comfort factor and assumes pools will operate on average at 70% peak time capacity.

Total Peak Visits

Age group	Peak visits (63%)	Comfort Capacity (70%)	Game Plan 2010
0-15	2031	2902	3511
16-24	734	1049	1269
25-39	2375	3393	4105
40-59	1788	2554	3090
60-79	605	865	1046
Total	7,533	10,762	13,022

The figure of total visits during peak times is used to calculate the size of swimming pool provision needed to serve this demand at any one time. This highlights the:

- potential demand for swimming at peak times based on participation rates
- potential demand for swimming at peak times allowing for a comfort factor
- potential demand for swimming at peak times if the targets in Game Plan are achieved

Capacity	Standard	Game Plan 2010
154	220	266
6	6	6
922	1318	1595

Dividing the total peak visits by the number of peak sessions(49)  
divide by the water area required by one person (6m<sup>2</sup> of pool area).  
The total demand from the catchment area, measured in square metres of pool.

Capacity	Comfort	Game Plan 2010
922	1318	
949	1356	
972	1389	1680

**Water area required to meet potential demand/m<sup>2</sup>, in 2001 :**  
The corresponding demand in 2005 will be :  
The corresponding demand in 2010 will be :

Pool Units Required in 2001:	4.4	6.2
Pool Units Required in 2005:	4.5	6.4
Pool Units Required in 2010:	4.6	6.6
Pool Units Required in 2010 (Game Plan adjusted):		7.9

A pool unit is equal to: 212 m<sup>2</sup> or a 4 lane 25 metre pool

## MtF Demand Model - Swimming Pool - PART B - MODEL RUNS

**Target Area:** St Albans District

**Target Site:** N/A



The total demand (calculated in the pool demand sheet) is then compared to the supply of pool area within the catchment area. There are three scenarios considered:

(1). **Present situation.** In the year 2005 the existing pool area available is compared to the corresponding estimated demand.

Using projected demand in the year 2010 and population projections to estimate any change in demand, the situation in 2010 is estimated. It is assessed under two conditions.

(2). **Worst Case Scenario.** Assumes that all current planning applications will come to fruition.

(3). **Most Likely Scenario.** Assumes that only the projects that are currently underway (have gained planning permission) will eventually be completed.

### The Three Scenarios

1. Present Situation

Year 2005

Using the 2001 Census population projections, and only those facilities that are presently built

Existing Sites

Supply in Year 2005	
Public LCs	3
Dual Use	1
Club Use	2
Total	6

Demand in Year 2005

= 1,356

Existing pool area (m<sup>2</sup>)

Public LCs	1,043
Dual Use	187.5
Club Use	0
Total	1230.5

There is an unmet demand equivalent to 125 sqm

## 2. Worst Case Scenario (Do everything)

Using population projection to the year 2010, and assumes all planned developments come to fruition

Supply in Year 2010	
Existing Sites	Public LCs 3
	Dual Use 1
	Club Use 2
Planned Sites	Public LCs 0
	Dual Use 1
	Club Use 0
Total Sites	Total 7

Existing pool area (m <sup>2</sup> )	Public LCs 1043
	Dual Use 187.5
	Club Use 0
Planned pool area (m <sup>2</sup> )	Public LCs 0
	Dual Use 243.75
	Club Use 0
	Total 1474.25

Demand in Year 2010	
= 1,389	

There is an over supply equivalent to 85 sqm

Unmet demand (Game Plan adjusted) 206

### 3. Most Likely Scenario (Do something)

Using population projection to the year 2010, and only planned developments where building work has started on site.

Supply in Year 2010		Demand in Year 2010	Game Plan
Existing Sites	Public LCs	= 1,389	= 1,680 (Game Plan Adjusted)
	Dual Use		
	Club Use		
Planned Sites	Public LCs	There is an unmet demand equivalent to 451 sqm	Unmet Demand (Game Plan Adjusted) 743 sqm
	Dual Use		
	Club Use		
Total Sites	Total		

Existing pool area (m <sup>2</sup> )	Public LCs	721
	Dual Use	187.5
	Club Use	0
Planned pool area (m <sup>2</sup> )	Public LCs	29
	Dual Use	0
	Club Use	0
	Total	937.5

Notes:

Public LCs - Public leisure centres with unrestricted public access

Dual Use - Leisure centres that only allow public access during out of school hours and holidays. Supply has been reduced by 25% to reflect this.

Club Use - Facilities that can only be hired out as a whole, to clubs and associations, usually on a block booking system. Such facilities do not provide staff or any other support. These facilities are therefore not included in the model.

MtF Demand Model - Sports Halls - PART A - DEMAND SIDE

Target Area: St Albans District

Target Site: N/A

Any model is based on a number of assumptions. The assumptions used in this model are as follows:

Assumptions/Parameters used in Model:

- ☐ Proportion of visits during peak times = 60%
- ☐ Average duration of visit = 1 hour
- ☐ Normal peak periods = 40.5 hours per week
- ☐ At one time capacity = 5 people per badminton court

Source: 2004 Sport England

These assumptions are then applied to the population (classified by age and gender) of the target area. Calculated Sport England demand parameters for each category of age and gender are also applied (see the following table).

Demand Assessment Table

Demand in relation to the age and gender profile of the target area is calculated by applying Sport England demand parameters to it.

Age Group	Population		Rate of Participation (%)		Participation Nr's		Frequency of participation (per week)		Visits per week		Peak Visits (60%)	Comfort Capacity (80%)
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		
0-15	13,483	13,099	9.55	6.03	1,288	790	0.85	0.99	1,094	782	1,126	1,407
16-24	5,911	5,681	15.04	9.31	889	529	0.88	0.85	782	450	739	924
25-34	9,643	9,644	14.96	11.66	1,443	1,124	0.88	1.03	1,269	1,158	1,457	1,821
35-44	10,625	10,579	11.08	9.40	994	994	0.90	0.90	1,060	895	1,173	1,466
45-59	12,687	12,631	5.68	5.40	721	682	0.92	1.02	663	696	815	1,019
60-79	9,578	10,685	5.55	4.28	532	457	1.10	1.27	585	581	699	874
Total	61,927	62,319							5,454	4,561	6,009	7,511

Quantifying Demand

The figure of total visits during peak times is used to calculate the size of a sports hall needed to serve this demand at any one time.

This is calculated by :

- ☐ dividing the total peak visits by the number of peak sessions (40.5) :
- ☐ divide this number by the average number of people that play on a badminton court (5) :

This leaves one number signifying the total demand from the catchment area, measured in badminton courts.

Current

No of badminton courts demand in 2001	37.1	courts
The corresponding demand in 2005 will be:	38.2	courts
The corresponding demand in 2010 will be:	39.1	courts

- Number of four court sports halls required in 2001 is: 9.3
- Number of four court sports halls required in 2005 is: 9.5
- Number of four court sports halls required in 2010 is: 9.8

Note: Demand will change over time in relation to the increase or decrease in resident population.

Standard	185
	5
	37.1

Demand Sensitivities

The model calculates the total potential demand for sports halls and assumes that each hall will operate on average at 75% peak time capacity to provide comfort for users and types of activity. Once this 75% capacity has been exceeded it assumes that people will choose not to use the hall and either find an alternative hall or not participate in activity.

A number of sensitivities have been calculated:

**Capacity** - this is the theoretical sports hall area to meet the demand for hall based activities based on current participation rates with the hall operating at capacity during peak times. This does not allow for the comfort factor (this is the basis on which previous models (FPM and MIF) have been calculated).

**Standard** - this identifies the potential demand for sports hall provision and assumes that all barriers to participation are removed. This includes an allowance for a comfort factor and equates to the Sport England Facility Calculator.

**Game Plan** - this assumes that the targets in Game Plan are achieved (50% participation in 2010 and 70% in 2020) with sports hall activities increasing proportionately to the increase in participation. This allows for the comfort factor and assumes halls will operate on average at 75% peak time capacity.

Total Peak Visits

Age group	Peak visits (60%)	Comfort Capacity (80%)	Game Plan 2010
0-15	1126	1407	1703
16-24	739	924	1118
25-34	1457	1821	2203
34-44	1173	1466	1774
45-59	815	1019	1233
60-79	699	874	1058
Total	6,009	7,511	9,088

The figure of total visits during peak times is used to calculate the size of sports hall provision needed to serve this demand at any one time. This highlights the:

- potential demand for sports halls at peak times based on participation rates
- potential demand for sports hall at peak times allowing for a comfort factor
- potential demand for sports halls at peak times if the targets in Game Plan are achieved

Capacity	Standard	Game Plan 2010
146	185	224
5	5	5
30	37	45

Dividing the total peak visits by the number of peak sessions(40.5) divide this number by the average number of people that play on a badminton court (5) : The total demand from the catchment area, measured in badminton courts.

Capacity	Standard	Game Plan 2010
30	37	
31	38	
31	39	47

**No of badminton courts demand in 2001**  
The corresponding demand in 2005 will be:  
The corresponding demand in 2010 will be:

Number of four court sports halls required in 2001 is	7.4	9.3
Number of four court sports halls required in 2005 is	7.6	9.5
Number of four court sports halls required in 2010 is	7.8	9.8
		11.8



# MtF Demand Model - Health and Fitness - PART A - DEMAND SIDE

## FORECAST

Target Area: St Albans District

Target Site: N/A



### Generic Assumptions Used in the Model

- ☐ The model defines health and fitness users as all people participating in health and fitness, including private club members, users of local authority facilities, home users.
- ☐ The model is based on the premise that for the supply to be sufficient, it must be large enough to cater for the maximum demand at any one time.
- ☐ Maximum demand is described as the demand during a peak hour/session.
- ☐ Penetration of health and fitness users is defined using results from MtF's Sport and Leisure Potential Report.
- ☐ This report is derived from a representative sample of nearly 1 million people who completed a survey, a significant number of which reside within the target area. The penetration rate is therefore dependent upon the character of people in the target catchment area.
- ☐ A figure of 19.7% penetration was attained for GB as a whole. This is a current figure and does not take into account market trends in health and fitness.
- ☐ A reduction of 10% in the demand for stations is assumed to represent the proportion of health and fitness users who do not use gyms, including 'home' users, etc. The reduction is subtracted at the end of the model calculations.

### Parameters Used in the Model

- ☐ A potential penetration rate of 24.3% will be used. This figure was obtained from the Sport and Leisure Potential Report for this target area. It includes **all** health and fitness users (from home gym users to members of private health and fitness clubs)
- ☐ The average health and fitness session is one hour
- ☐ 65% of use is during peak times
- ☐ Peak times are 5-9pm Monday to Friday and 9am-5pm weekends (36 hours in a week).
- ☐ The average user participates on average 1.5 times per week or six times a month.
- ☐ The at one time capacity of a health and fitness facility is calculated by the ratio of one user per station.

### The Calculations Used to Calculate Demand (2001)

Total Adult Population = 98,155  
 Number of Potential members/users of health and fitness clubs = 24.3% of total adults = 23,852  
 Number of visits per week = potential members/users \* 1.5 = 35,778  
 Number of visits per week in peak times = 65% of total number of visits = 23,255  
 Number of visits in one hour of peak time = total visits during peak times / 36 = 646  
 Reduce figure by 10% to account for non gym users = 581

A total number of 581 stations would be required to cater for the predicted demand by potential members/users of any health and fitness facility.

### Quantifying Demand - demand changes over time as a result of changes in resident population.

In 2001 there will be a demand for : 581 stations  
 In 2005 there will be a demand for : 598 stations  
 In 2010 there will be a demand for : 613 stations

NB. Market trends have not been considered at this stage.





## Demographic Profile - 2001 Census



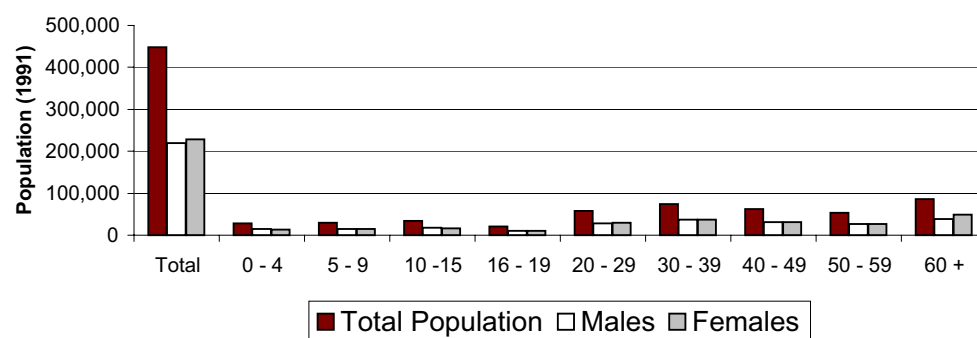
Report for : PMP  
 Defined Area: St Albans 5km Buffer  
 Postcode: N/A

	Results from area	Results as % of area	Results as % of England & Wales	Results as % of GB	From GB % Index (ave. =100)	Index difference	From England & Wales % Index (ave. =100)	Index difference
<b>Total Population</b>	448,294	100	100.0	100	100	0	100	0
0 - 4	28,439	6.3	6.0	5.7	111	11	106	6
5 - 9	29,233	6.5	6.4	6.2	105	5	103	3
10 -15	34,362	7.7	7.8	7.8	99	-1	98	-2
16 - 19	20,969	4.7	4.9	4.9	95	-5	95	-5
20 - 29	57,628	12.9	12.7	12.6	102	2	102	2
30 - 39	74,110	16.5	15.6	15.6	106	6	106	6
40 - 49	62,663	14.0	13.4	13.8	102	2	105	5
50 - 59	54,101	12.1	12.6	12.6	96	-4	96	-4
60 +	86,789	19.4	20.8	20.9	93	-7	93	-7
<b>Males</b>								
Total	219,925	49.1	48.7	48.4	101	1	101	1
0 - 4	14,456	3.2	3.0	2.9	110	10	106	6
5 - 9	14,722	3.3	3.3	3.2	103	3	101	1
10 -15	17,711	4.0	4.0	4.0	99	-1	98	-2
16 - 19	10,579	2.4	2.5	2.5	94	-6	94	-6
20 - 29	28,489	6.4	6.3	6.2	103	3	102	2
30 - 39	36,766	8.2	7.7	7.6	108	8	107	7
40 - 49	31,865	7.1	6.6	6.8	105	5	107	7
50 - 59	27,133	6.1	6.2	6.2	97	-3	97	-3
60 +	38,204	8.5	9.1	9.0	95	-5	94	-6
<b>Females</b>								
Total	228,369	50.9	51.3	51.6	99	-1	99	-1
0 - 4	13,983	3.1	2.9	2.8	112	12	107	7
5 - 9	14,511	3.2	3.1	3.0	107	7	104	4
10 -15	16,651	3.7	3.8	3.8	98	-2	97	-3
16 - 19	10,390	2.3	2.4	2.4	95	-5	97	-3
20 - 29	29,139	6.5	6.4	6.4	102	2	101	1
30 - 39	37,344	8.3	7.9	8.0	105	5	105	5
40 - 49	30,798	6.9	6.7	7.0	99	-1	102	2
50 - 59	26,968	6.0	6.3	6.4	94	-6	95	-5
60 +	48,585	10.8	11.7	11.9	91	-9	93	-7
<b>Ethnic Origin</b>								
All White	412,633	92.0	90.9	0.0	N/A	N/A	101	1
White - British	387,330	86.4	87.0	0.0	N/A	N/A	99	-1
White - Irish	10,347	2.3	1.3	0.0	N/A	N/A	182	82
White - Other	14,956	3.3	2.7	0.0	N/A	N/A	125	25
All Black	7,231	1.6	2.3	0.0	N/A	N/A	70	-30
Black - Caribbean	3,789	0.8	1.1	0.0	N/A	N/A	74	-26
Black - African	2,935	0.7	1.0	0.0	N/A	N/A	68	-32
Black - Other	507	0.1	0.2	0.0	N/A	N/A	58	-42
Chinese	2,763	0.6	0.4	0.0	N/A	N/A	137	37

	Results from area	Results as % of area	Results as % of England & Wales	Results as % of GB	From GB % Index (ave. =100)	Index difference	From England & Wales % Index (ave. =100)	Index difference
<b>Ethnic Origin contd</b>								
All Asian	16,470	3.7	4.6	0.0	N/A	N/A	80	-20
Asian - Indian	6,254	1.4	2.1	0.0	N/A	N/A	67	-33
Asian - Pakistani	5,225	1.2	1.4	0.0	N/A	N/A	81	-19
Asian - Bangladeshi	2,758	0.6	0.6	0.0	N/A	N/A	110	10
Asian - Other	2,233	0.5	0.5	0.0	N/A	N/A	103	3
Others	1,837	0.4	0.4	0.0	N/A	N/A	94	-6
All Mixed	7,182	1.6	1.3	0.0	N/A	N/A	122	22
White and Black Caribbean	2,340	0.5	0.5	0.0	N/A	N/A	111	11
White and Black African	677	0.2	0.2	0.0	N/A	N/A	97	-3
Mixed - White and Asian	2,333	0.5	0.4	0.0	N/A	N/A	138	38
Mixed - Others	1,832	0.4	0.3	0.0	N/A	N/A	133	33
<b>Residents who have a limiting long-term illness</b>	60,955	13.6	17.0	17.5	78	-22	80	-20
<b>Economic Activity of Household Residents (aged 16 and over)</b>								
Total	363,867	[total of all economic sub-types]						
In Full-time employment	170,670	46.9	39.0	40.5	116	16	120	20
In Part-time employment	52,650	14.5	12.8	13.1	110	10	113	13
Self employed	30,253	8.3	5.2	5.7	147	47	159	59
Unemployed	7,361	2.0	2.5	3.0	66	-34	82	-18
Students	23,872	6.6	18.3	12.5	52	-48	36	-64
Permanently Sick/Disabled	10,671	2.9	4.3	5.6	53	-47	67	-33
Retired	39,929	11.0	9.9	11.3	97	-3	111	11
Other inactive	7,967	2.2	2.5	3.1	72	-28	86	-14
Looking after home/family	20,494	5.6	5.3	5.2	108	8	105	5
<b>Males</b>								
In Full-time employment	110,811	30.5	25.3	26.0	117	17	120	20
In Part-time employment	11,508	3.2	2.7	2.7	118	18	117	17
Self employed	22,417	6.2	3.8	4.1	150	50	162	62
Unemployed	4,439	1.2	1.5	1.9	63	-37	82	-18
Students	11,568	3.2	9.2	6.1	52	-48	35	-65
Permanently Sick/Disabled	5,546	1.5	2.4	3.0	51	-49	64	-36
Retired	17,201	4.7	4.0	4.5	104	4	118	18
Other inactive	3,495	1.0	1.1	1.3	72	-28	87	-13
Looking after home/family	948	0.3	0.4	0.4	67	-33	71	-29
<b>Female</b>								
In Full-time employment	59,859	16.5	13.7	14.5	113	13	120	20
In Part-time employment	41,142	11.3	10.1	10.5	108	8	112	12
Self employed	7,836	2.2	1.5	1.6	136	36	143	43
Unemployed	2,922	0.8	1.0	1.1	72	-28	83	-17
Students	12,304	3.4	9.4	6.5	52	-48	36	-64
Permanently Sick/Disabled	5,125	1.4	2.0	2.6	55	-45	71	-29
Retired	22,728	6.2	6.2	6.9	90	-10	100	0
Other inactive	4,472	1.2	1.4	1.7	71	-29	85	-15
Looking after home/family	19,546	5.4	5.0	4.8	112	12	108	8
<b>Lone Parents</b>								
Total	356,260	[Total of All People aged 16+]						
Male	17,583	4.9	5.6	6.0	82	-18	87	-13
Female	2,776	0.8	0.8	0.8	97	-3	100	0
	14,807	4.2	4.9	5.2	80	-20	85	-15

	Results from area	Results as % of area	Results as % of England & Wales	Results as % of GB	From GB % Index (ave. =100)	Index difference	From England & Wales % Index (ave. =100)	Index difference
<b>Tenure of Households</b>								
<b>Total Occupied Household Spaces</b>	182,900							
Owned	128,102	70.0	68.7	65.7	107	7	102	2
Private Rented or Living Rent Free	17,682	9.7	12.0	11.2	87	-13	80	-20
Rented from Council	28,420	15.5	13.2	17.4	89	-11	118	18
Other Social Rented	8,696	4.8	6.1	5.8	82	-18	78	-22
<b>Car Availability by Household</b>								
with no car	35,575	19.5	26.8	30.5	64	-36	72	-28
with 1 car	77,071	42.1	43.7	43.5	97	-3	96	-4
with 2 cars	70,252	38.4	29.5	26.0	148	48	130	30
<b>Social Class of Head of Household</b>								
<b>Total Head of Household (aged 16+)</b>	349,164							
AB - Higher & Intermediate managerial/admin/professional	104,278	29.9	22.2	20.6	145	45	135	35
Supervisory, clerical, junior C2 - Skilled manual workers	107,612	30.8	29.7	28.1	110	10	104	4
D - Semi-skilled & unskilled manual workers	42,560	12.2	15.1	14.8	82	-18	81	-19
E - On state benefit, unemployed, lowest grade	47,237	13.5	17.0	17.3	78	-22	79	-21
	47,477	13.6	16.0	19.2	71	-29	85	-15

Graph to illustrate population by age and gender.



## Population Projection Report

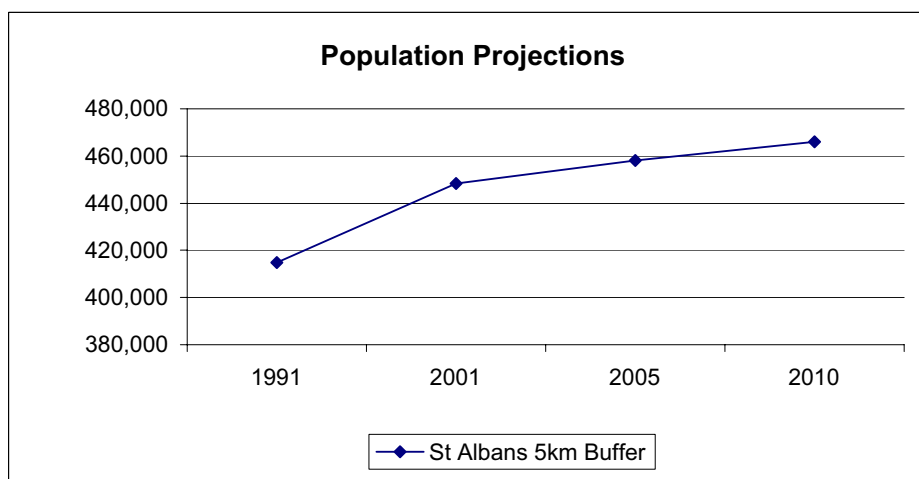


**Report for :** PMP  
**Defined Area:** St Albans 5km Buffer  
**Postcode:** N/A

### Data Table:

	Population
1991	414,723
2001	448,294
2005	457,991
2010	466,077

Population Projections	1991-2000	2001-2005	2001-2010
St Albans 5km Buffer	7.5%	2.2%	4.0%
Actual Total Change	33,571	9,697	17,783



Source: 1996 Sub-National Projections. Reproduced by permission of the Office of National Statistics.  
© Crown Copyright

© Mapping the Future™

Note: Some variations may occur in projections due to the changes in postal geography.

## MtF Demand Model - Swimming Pools - PART A - DEMAND SIDE

Target Area: **St Albans 5km Buffer**

Target Site: **N/A**

Any model is based on a number of assumptions. The assumptions used in this model are as follows:

### Assumptions/Parameters used in Model

Source: 2004 Sport England

- ☐ Proportion of visits during peak times = 63%
- ☐ Average duration of visit = 64 minutes (lank), 68 minutes (leisure pool)
- ☐ Normal peak periods = 52 hours per week = 49 peak sessions
- ☐ At one time capacity = 6m<sup>2</sup> per person
- ☐ A one time capacity is defined as the supply/capacity of one m<sup>2</sup> of pool area at any one time
- ☐ Capacity per 212m<sup>2</sup> (1 pool unit) = 35 people. (number of metres squared divided by the at one time capacity of one m<sup>2</sup>)
- ☐ A pool unit is defined as an average four lane, 25 metre pool.

These assumptions are then applied to the population (classified by age and gender) of the target area. Calculated Sport England demand parameters for each category of age and gender are also applied (see the following table).

### Demand Assessment Table

Demand in relation to the age and gender profile of the target area is calculated by applying the Sport England parameters to it.

Age group	Population		Rate of participation (%)		Participation numbers		Frequency of participation (per week)		Visits per week		Peak visits (63%)	Comfort Capacity (70%)
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		
0-15	46,889	45,145	13.23	12.72	6203	5742	0.92	0.95	5707	5455	7032	10046
16-24	24,068	24,117	10.86	14.51	2614	3499	0.84	0.76	2196	2660	3059	4370
25-39	51,766	52,756	13.73	18.89	7107	9966	0.71	0.79	5046	7873	8139	11627
40-59	58,998	57,766	8.13	10.44	4797	6031	0.94	0.81	4509	4885	5918	8454
60-79	32,323	36,845	3.93	4.52	1270	1665	1.18	1.07	1499	1782	2067	2953
Total	214,044	216,629			21,992	26,904			18,957	22,655	26,215	37,450

### Quantifying Demand

The figure of total visits during peak times is used to calculate the size of a swimming pool needed to serve this demand at any one time.

This is calculated by:

- ☐ dividing the total peak visits by the number of peak sessions(49)
- ☐ divide by the water area required by one person (6m<sup>2</sup> of pool area).

This leaves one number signifying the total demand from the catchment area, measured in square metres of pool.

<b>Standard</b>
764
6
4586

### Standard

**Water area required to meet potential demand/m<sup>2</sup>, in 2001 :** **4586** m<sup>2</sup>

The corresponding demand in 2005 will be : **4685** m<sup>2</sup>

The corresponding demand in 2010 will be : **4768** m<sup>2</sup>

**Pool Units Required in 2001:** **21.6**

**Pool Units Required in 2005:** **22.1**

**Pool Units Required in 2010:** **22.5**

A pool unit is equal to: 212 m<sup>2</sup> or a 4 lane 25 metre pool

*Note: Demand will change over time in relation to the increase or decrease in resident population.*

Demand Sensitivities

The model calculates the total potential demand for swimming and assumes that each pool will operate on average at 70% peak time capacity to provide comfort for users. Once this 70% capacity has been exceeded it assumes that people will choose not to use the pool and either find an alternative pool or not go swimming.

A number of sensitivities have been calculated:

**Capacity** - this is the theoretical pool area to meet the demand for swimming based on current participation rates with the pool operating at capacity during peak times  
This does not allow for the comfort factor (this is the basis on which previous models (FPM and MIF) have been calculated)

**Standard** - this identifies the potential demand for swimming provision and assumes that all barriers to participation are removed. This includes an allowance for a comfort factor and equates to the Sport England Facility Calculator

**Game Plan** - this assumes that the targets in Game Plan are achieved (50% participation in 2010 and 70% in 2020) with swimming increasing proportionately to the increase in participation. This allows for the comfort factor and assumes pools will operate on average at 70% peak time capacity.

Total Peak Visits

Age group	Peak visits (63%)	Comfort Capacity (70%)	Game Plan 2010
0-15	7032	10046	12156
16-24	3059	4370	5287
25-39	8139	11627	14069
40-59	5918	8454	10230
60-79	2067	2953	3573
Total	26,215	37,450	45,315

The figure of total visits during peak times is used to calculate the size of swimming pool provision needed to serve this demand at any one time. This highlights the:

- potential demand for swimming at peak times based on participation rates
- potential demand for swimming at peak times allowing for a comfort factor
- potential demand for swimming at peak times if the targets in Game Plan are achieved

Capacity	Standard	Game Plan 2010
535	764	925
6	6	6
3210	4586	5549

Dividing the total peak visits by the number of peak sessions(49)  
divide by the water area required by one person (6m<sup>2</sup> of pool area).  
The total demand from the catchment area, measured in square metres of pool.

Capacity	Comfort	Game Plan 2010
3210	4586	
3279	4685	
3337	4768	5769

**Water area required to meet potential demand/m<sup>2</sup>, in 2001 :**  
The corresponding demand in 2005 will be :  
The corresponding demand in 2010 will be :

Pool Units Required in 2001:	15.1	21.6
Pool Units Required in 2005:	15.5	22.1
Pool Units Required in 2010:	15.7	22.5
Pool Units Required in 2010 (Game Plan adjusted):		27.2

A pool unit is equal to: 212 m<sup>2</sup> or a 4 lane 25 metre pool

## MtF Demand Model - Swimming Pool - PART B - MODEL RUNS



**Target Area:** St Albans 5km Buffer

**Target Site:** N/A

The total demand (calculated in the pool demand sheet) is then compared to the supply of pool area within the catchment area. There are three scenarios considered:

(1). **Present situation.** In the year 2005 the existing pool area available is compared to the corresponding estimated demand.

Using projected demand in the year 2010 and population projections to estimate any change in demand, the situation in 2010 is estimated. It is assessed under two conditions.

(2). **Worst Case Scenario.** Assumes that all current planning applications will come to fruition.

(3). **Most Likely Scenario.** Assumes that only the projects that are currently underway (have gained planning permission) will eventually be completed.

### The Three Scenarios

# 1. Present Situation

Using the 2001 Census population projections, and only those facilities that are presently built

Existing Sites

Supply in Year 2005	
Public LCs	7
Dual Use	2
Club Use	7
Private	3
Total	19

Demand in Year 2005
= 4,685

Existing pool area (m<sup>2</sup>)

Public LCs	2,305
Dual Use	307.5
Club Use	0
Total	2612

There is an unmet demand equivalent to 2,073 sqm

## 2. Worst Case Scenario (Do everything)

Using population projection to the year 2010, and assumes all planned developments come to fruition

Supply in Year 2010

Existing Sites	Public LCs	7
	Dual Use	2
	Club Use	7
	Private	2
Planned Sites	Public LCs	0
	Dual Use	1
	Club Use	0
Total Sites	Total	19

Demand in Year 2010

= 4,768

There is an unmet demand equivalent to

1,882

sqm

Unmet demand (Game Plan Adjusted)

2,884

sqm

Existing pool area (m <sup>2</sup> )	Public LCs	2305
	Dual Use	307.5
	Club Use	0
Planned pool area (m <sup>2</sup> )	Public LCs	29
	Dual Use	243.75
	Club Use	0
	Total	2885.25

### 3. Most Likely Scenario (Do something)

Using population projection to the year 2010, and only planned developments where building work has started on site.

Existing Sites	<b>Supply in Year 2010</b>		<b>Demand in Year 2010</b> = 4,768	<b>Game Plan</b> = 5,769 (Game Plan Adjusted)
	Public LCs	7		
	Dual Use	2		
	Club Use	7		
	Private	3		
Planned Sites	Public LCs	0	There is an unmet demand equivalent to 2,449 sqm	Unmet Demand (Game Plan Adjusted) 3,450 sqm
	Dual Use	0		
	Club Use	0		
Total Sites	Total	19		
Existing pool area (m <sup>2</sup> )	Public LCs	1982.5	There is an unmet demand equivalent to 2,449 sqm	Unmet Demand (Game Plan Adjusted) 3,450 sqm
	Dual Use	307.5		
	Club Use	0		
	Total	2319		
Planned pool area (m <sup>2</sup> )	Public LCs	29		
	Dual Use	0		
	Club Use	0		
	Total	29		

Notes:

Public LCs - Public leisure centres with unrestricted public access

Dual Use - Leisure centres that only allow public access during out of school hours and holidays. Supply has been reduced by 25% to reflect this.

Club Use - Facilities that can only be hired out as a whole, to clubs and associations, usually on a block booking system. Such facilities do not provide staff or any other support. These facilities are therefore not included in the model.

MtF Demand Model - Sports Halls - PART A - DEMAND SIDE



Target Area: St Albans 5km Buffer

Target Site: N/A

Any model is based on a number of assumptions. The assumptions used in this model are as follows:

Assumptions/Parameters used in Model:

- ☐ Proportion of visits during peak times = 60%
- ☐ Average duration of visit = 1 hour
- ☐ Normal peak periods = 40.5 hours per week
- ☐ At one time capacity = 5 people per badminton court

Source: 2004 Sport England

These assumptions are then applied to the population (classified by age and gender) of the target area. Calculated Sport England demand parameters for each category of age and gender are also applied (see the following table).

Demand Assessment Table

Demand in relation to the age and gender profile of the target area is calculated by applying Sport England demand parameters to it.

Age Group	Population		Rate of Participation (%)		Participation Nr's		Frequency of participation (per week)		Visits per week		Peak Visits (60%)	Comfort Capacity (80%)
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		
0-15	46,889	45,145	9.55	6.03	4,478	2,722	0.85	0.99	3,806	2,695	3,901	4,876
16-24	24,068	24,117	15.04	9.31	3,620	2,245	0.88	0.85	3,185	1,908	3,056	3,820
25-34	32,773	33,589	14.96	11.66	4,903	3,916	0.88	1.03	4,314	4,034	5,009	6,261
35-44	36,066	36,737	11.08	9.40	3,996	3,359	0.90	0.90	3,597	3,023	3,972	4,965
45-59	41,925	41,196	5.68	5.40	2,381	2,225	0.92	1.02	2,191	2,269	2,676	3,345
60-79	32,323	36,845	5.55	4.28	1,794	1,577	1.10	1.27	1,973	2,003	2,386	2,982
Total	214,044	216,629							19,067	15,933	21,000	26,250

Quantifying Demand

The figure of total visits during peak times is used to calculate the size of a sports hall needed to serve this demand at any one time.

This is calculated by :

- ☐ dividing the total peak visits by the number of peak sessions (40.5) :
- ☐ divide this number by the average number of people that play on a badminton court (5) :

This leaves one number signifying the total demand from the catchment area, measured in badminton courts.

Current

No of badminton courts demand in 2001	129.6	courts
The corresponding demand in 2005 will be:	132.4	courts
The corresponding demand in 2010 will be:	134.8	courts

- Number of four court sports halls required in 2001 is: 32.4
- Number of four court sports halls required in 2005 is: 33.1
- Number of four court sports halls required in 2010 is: 33.7

Note: Demand will change over time in relation to the increase or decrease in resident population.

Standard
648
5
129.6



Demand Sensitivities

The model calculates the total potential demand for sports halls and assumes that each hall will operate on average at 75% peak time capacity to provide comfort for users and types of activity. Once this 75% capacity has been exceeded it assumes that people will choose not to use the hall and either find an alternative hall or not participate in activity.

A number of sensitivities have been calculated:

**Capacity** - this is the theoretical sports hall area to meet the demand for hall based activities based on current participation rates with the hall operating at capacity during peak times. This does not allow for the comfort factor (this is the basis on which previous models (FPM and MIF) have been calculated).

**Standard** - this identifies the potential demand for sports hall provision and assumes that all barriers to participation are removed. This includes an allowance for a comfort factor and equates to the Sport England Facility Calculator.

**Game Plan** - this assumes that the targets in Game Plan are achieved (50% participation in 2010 and 70% in 2020) with sports hall activities increasing proportionately to the increase in participation. This allows for the comfort factor and assumes halls will operate on average at 75% peak time capacity.

Total Peak Visits

Age group	Peak visits (60%)	Comfort Capacity (80%)	Game Plan 2010
0-15	3901	4876	5900
16-24	3056	3820	4623
25-34	5009	6261	7576
34-44	3972	4965	6008
45-59	2876	3345	4047
60-79	2386	2962	3608
Total	21,000	26,250	31,762

The figure of total visits during peak times is used to calculate the size of sports hall provision needed to serve this demand at any one time. This highlights the:

- potential demand for sports halls at peak times based on participation rates
- potential demand for sports hall at peak times allowing for a comfort factor
- potential demand for sports halls at peak times if the targets in Game Plan are achieved

Capacity	Standard	Game Plan 2010
519	648	784
5	5	5
104	130	157

Dividing the total peak visits by the number of peak sessions(40.5) divide this number by the average number of people that play on a badminton court (5) :  
The total demand from the catchment area, measured in badminton courts.

Capacity	Standard	Game Plan 2010
104	130	
106	132	
108	135	163

**No of badminton courts demand in 2001**  
The corresponding demand in 2005 will be:  
The corresponding demand in 2010 will be:

Number of four court sports halls required in 2001 is	25.9	32.4
Number of four court sports halls required in 2005 is	26.5	33.1
Number of four court sports halls required in 2010 is	27.0	33.7
		40.8

**MtF Demand Model - Sports Halls - PART B - MODEL RUNS****Target Area:** St Albans 5km Buffer**Target Site:** N/A

The total demand (calculated in the hall demand sheet) is then compared to the supply of sports halls within the catchment area. There are three scenarios considered:

(1). **Present situation.** In the year 2005 the existing sports halls available are compared to the corresponding estimated demand.

Using projected demand in the year 2010 and population projections to estimate any change in demand, the situation in 2010 is estimated. It is assessed under two conditions.

(2). **Worst Case Scenario.** Assumes that all current planning applications will come to fruition.

(3). **Most Likely Scenario.** Assumes that only the projects that are currently underway B35.

# 1. Present Situation

Using population projections to the year 2000, and only those facilities that are presently built.

Existing Sites

Supply in Year 2005	
Public LCs	9
Dual Use	4
Club Use	8
Total	21

Demand in Year 2005

= 132

Existing badminton courts

Public LCs	45
Dual Use	15
Club Use	0
Total	60

There is an unmet demand equivalent to

72

courts

## 2. Worst Case Scenario (Do everything)

Using population projection to the year 2010, and assumes all planned developments come to fruition

Supply in Year 2010		
Existing Sites	Public LCs	9
	Dual Use	4
	Club Use	8
Planned Sites	Public LCs	1
	Dual Use	4
	Club Use	0
Total Sites	Total	26

Existing badminton courts	Public LCs	45
	Dual Use	15
	Club Use	0
Planned badminton courts	Public LCs	8
	Dual Use	12
	Club Use	0
Total	Total	80

Demand in Year 2010	
= 135	

There is an unmet demand equivalent to 55 courts

Unmet demand (Game Plan adjusted) 83 courts

### 3. Most Likely Scenario (Do something)

Using population projection to the year 2010, and only planned developments where building work has started on site.

Supply in Year 2010		
Existing Sites	Public LCs	9
	Dual Use	4
	Club Use	8
Planned Sites	Public LCs	1
	Dual Use	1
	Club Use	3
Total Sites	Total	26

Existing badminton courts	Public LCs	45
	Dual Use	15
	Club Use	0
Planned badminton courts	Public LCs	8
	Dual Use	3
	Club Use	0
Total	Total	71

Demand in Year 2010	
= 135	

There is an unmet demand equivalent to 64 courts

Unmet Demand (Game Pan Adjusted) 92 courts

Game Plan	
= 163	

(Game Plan Adjusted)

Notes:

- |            |  |
|------------|--|
| Public LCs | - Public leisure centres with unrestricted public access   |
| Dual Use   | - Leisure centres that only allow public access during out of school hours and holidays. Supply has been reduced by 25% to reflect this.   |
| Club Use   | - Facilities that can only be hired out as a whole, to clubs and associations, usually on a block booking system. Such facilities do not provide staff or any other support. These facilities are therefore not included in the model. |

# MtF Demand Model - Health and Fitness - PART A - DEMAND SIDE

FORECAST

Target Area: St Albans 5km Buffer

Target Site: N/A



## Generic Assumptions Used in the Model

- ☐ The model defines health and fitness users as all people participating in health and fitness, including private club members, users of local authority facilities, home users.
- ☐ The model is based on the premise that for the supply to be sufficient, it must be large enough to cater for the maximum demand at any one time.
- ☐ Maximum demand is described as the demand during a peak hour/session.
- ☐ Penetration of health and fitness users is defined using results from MtF's Sport and Leisure Potential Report.
- ☐ This report is derived from a representative sample of nearly 1 million people who completed a survey, a significant number of which reside within the target area. The penetration rate is therefore dependent upon the character of people in the target catchment area.
- ☐ A figure of 19.7% penetration was attained for GB as a whole. This is a current figure and does not take into account market trends in health and fitness.
- ☐ A reduction of 10% in the demand for stations is assumed to represent the proportion of health and fitness users who do not use gyms, including 'home' users, etc. The reduction is subtracted at the end of the model calculations.

## Parameters Used in the Model

- ☐ A potential penetration rate of 24.3% will be used. This figure was obtained from the Sport and Leisure Potential Report for this target area. It includes **all** health and fitness users (from home gym users to members of private health and fitness clubs)
- ☐ The average health and fitness session is one hour
- ☐ 65% of use is during peak times
- ☐ Peak times are 5-9pm Monday to Friday and 9am-5pm weekends (36 hours in a week).
- ☐ The average user participates on average 1.5 times per week or six times a month.
- ☐ The at one time capacity of a health and fitness facility is calculated by the ratio of one user per station.

## The Calculations Used to Calculate Demand (2001)

Total Adult Population = 339,485	
Number of Potential members/users of health and fitness clubs =	24.3% of total adults = 82,495
Number of visits per week = potential members/users * 1.5 =	123,742
Number of visits per week in peak times = 65% of total number of visits =	80,432
Number of visits in one hour of peak time = total visits during peak times / 36 =	2,235
Reduce figure by 10% to account for non gym users =	2,012
A total number of 2,012 stations would be required to cater for the predicted demand by potential members/users of any health and fitness facility.	

## Quantifying Demand - demand changes over time as a result of changes in resident population.

In 2001 there will be a demand for :	2,012 stations
In 2005 there will be a demand for :	2,055 stations
In 2010 there will be a demand for :	2,091 stations

NB. Market trends have not been considered at this stage.

**MtF Demand Model - Health and Fitness - PART B - MODEL RUNS****Target Area:** St Albans 5km Buffer**Target Site:** N/A

The total demand (calculated in the demand sheet) is then compared to the supply of stations within the catchment area. There are three scenarios considered:

(1). **Present situation.** In the year 2005 the existing stations available are compared to the corresponding estimated demand.

Using projected demand in the year 2010 and population projections to estimate any change in demand, the situation in 2010 is estimated. It is assessed under two conditions.

(2). **Worst Case Scenario.** Assumes that all current planning applications will come to fruition.

(3). **Most Likely Scenario.** Assumes that only the projects that are currently underway (have gained planning permission) will eventually be completed.

<b>1. Present Situation</b>		<b>Year 2005</b>
Using population projections to the year 2000, and only those facilities that are presently built.		
<b>Year 2005</b>	<b>Supply in Year 2005</b>	<b>Demand in Year 2005</b>
Existing Sites	Public	15
	Private	19
	<b>Total</b>	<b>34</b>
Existing Stations	Public	607
	Private	1572
	<b>Total</b>	<b>2179</b>
		There is an over supply equivalent to 124 stations

<b>2. Worst Case Scenario (Do everything)</b>		<b>Year 2010</b>
Using population projection to the year 2010, and all planned developments come to fruition		
<b>Year 2010</b>	<b>Supply in Year 2010</b>	<b>Demand in Year 2010</b>
Existing Sites	Public	15
	Private	19
	Planned	1
	<b>Total</b>	<b>35</b>
No of Stations	Public	607
	Private	1572
	Planned	161
	<b>Total</b>	<b>2340</b>
		There is an over supply equivalent to 249 stations

<b>3. Most Likely Scenario (Do something)</b>		<b>Year 2010</b>
Using population projection to the year 2010, and only planned developments which are looking favourable come to fruition		
<b>Year 2010</b>	<b>Supply in Year 2010</b>	<b>Demand in Year 2010</b>
Existing Sites	Public	15
	Private	19
	Planned	1
	<b>Total</b>	<b>35</b>
No of Stations	Public	607
	Private	1572
	Planned	91
	<b>Total</b>	<b>2270</b>
		There is an over supply equivalent to 179 stations

Notes:

No assumptions/consideration has been made regarding the quality of facilities. It is assumed that although private clubs require a membership fee to be paid before joining, no reduction in accessibility to the facility results. Similarly, the standard requirement in public facilities to undertake an induction before using the facility also has no impact on accessibility.



## Squash Courts

Any model is based on a number of assumptions. The assumptions used in this model are as follows:

- q Proportion of visits during peak times = 40%
- q Average duration of visit = 45 mins
- q Normal peak periods = 21 hours per week - Mon-Thur 1700-2215.
- q 28 sessions during peak times
- q At one time capacity = 2 people per court

These assumptions are then applied to the population (classified by age and gender) of the target area. Calculated demand parameters for each category of age and gender are also applied (see the following table).

### Demand Assessment Table

Demand in relation to the age and gender profile of the target area is calculated by applying demand parameters to it.

Age group	Population		Rate of participation		Participation numbers		Freq of participation		Visits per week		Peak visits (40%)
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
0-15	13,483	13,099	0.3	0.1	40	13	2	2	81	26	43
16-24	5,911	5,681	3.0	1.0	177	57	2	2	355	114	187
25-39	15,252	15,297	3.0	1.0	458	153	2	2	915	306	488
40-59	17,703	17,557	1.5	0.5	266	88	2	2	531	176	283
60-84	9,578	10,685	0.0	0.0	0	0	0	0	0	0	0
Total	44,224	44,762			675	223			1,351	446	719

### Quantifying Demand

The figure of total visits during peak times is used to calculate the size of a sports hall needed to serve this demand at any one time.

This is calculated by: dividing the total peak visits by the number of peak sessions :

$$\frac{719}{28}$$

This leaves one number signifying the total demand from the catchment area, measured in squash courts :

$$\frac{2}{12.8}$$

*Note: Demand will change over time in relation to the increase or decrease in resident population.*



# Squash Courts

Any model is based on a number of assumptions. The assumptions used in this model are as follows:

- q Proportion of visits during peak times = 40%
- q Average duration of visit = 45 mins
- q Normal peak periods = 21 hours per week - Mon-Thur 1700-2215.
- q 28 sessions during peak times
- q At one time capacity = 2 people per court

These assumptions are then applied to the population (classified by age and gender) of the target area. Calculated demand parameters for each category of age and gender are also applied (see the following table).

## Demand Assessment Table

Demand in relation to the age and gender profile of the target area is calculated by applying demand parameters to it.

Age group	Population		Rate of participation		Participation numbers		Freq of participation		Visits per week		Peak visits (40%)
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
0-15	46,889	45,145	0.3	0.1	141	45	2	2	281	90	149
16-24	24,068	24,117	3.0	1.0	722	241	2	2	1444	482	771
25-39	51,766	52,756	3.0	1.0	1553	528	2	2	3106	1055	1664
40-59	58,998	57,766	1.5	0.5	885	289	2	2	1770	578	939
60-84	32,323	36,845	0.0	0.0	0	0	0	0	0	0	0
Total	214,044	216,629			2,416	814			4,831	1,628	2,584

## Quantifying Demand

The figure of total visits during peak times is used to calculate the size of a sports hall needed to serve this demand at any one time.

This is calculated by: 
$$\frac{2,584}{28} = 92.3$$

divide this number by the average number of people that play on a squash court : 
$$\frac{92.3}{2} = 46.1$$

The number of squash courts required is: 46.1

**APPENDIX J**

**DRAFT SUPPLEMENTARY PLANNING GUIDANCE**  
**EXTRACT**

**Extract from:**

**Sport England/Milton Keynes Council/English Partnerships**

**Joint Pilot Project**

**Draft Supplementary Planning Guidance on Open Space Sport and Recreation**

**March 2004**

Martin J Elson  
Planning Policies Research Group  
Department of Planning  
Oxford Brookes University

This document is only for discussion at this stage and does not form part of the Milton Keynes Second Deposit Plan (October 2002)

(Can be found at:  
[http://www.sportengland.org/index/get\\_resources/resource\\_ps/kitbag\\_front\\_page/kitbag-good-practice-egs.htm#supp](http://www.sportengland.org/index/get_resources/resource_ps/kitbag_front_page/kitbag-good-practice-egs.htm#supp))



### Calculation of Swimming Pool Contributions

Information from Sport England as follows:

Based on output of 'demand estimator' that uses up-to-date Facilities Planning Model parameters (reviewed in the light of information from Sport England benchmarking service, and latest GHS and Census figures).

Based on 2001 Census population breakdown for Milton Keynes, 1,000 persons would demand 7.72 sq metres of pool space. (The 28,000 estimated population increase to 2011 would demand 216.02 sq m of pool space).

Costs of constructing pool space are the median of two figure;  
'Swim 25' commercial product and RICS Building Cost Information Service.

The estimate is £16,424 per sq metre, giving a payment of **£126.80** per person.

[The assumptions within the cost calculations are as follows;

-second quarter 2003 prices

-15 per cent external works

-normal site, not brownfield site]

Median of two methods of calculation below

A. 'Swim 25' commercial product based on 25 metre community pool, including moveable floor = £2,997,250 million; made up of

• Building and external works	£2,500,000
• Moveable floor	£200,000
• VAT	£47,250
• Remedial costs .....	£250,000

B. Building Cost Information Service (RICS) averages with extras to allow for new legislation = £2,805,925; made up of

• Building	£2,200,000
• Regional building costs rating of 1.05	£110,000
• Moveable floor	£200,000
• VAT	£45,925
• Remedial costs	£250,000

Median value is £2,901,687

Sq metres of water 212

Cost per sq m of water is £13,687.20p

Add 20% comfort factor [advice from Sport England].

Cost per sq. m of water is £16,424.40p

Cost per 1,000 persons is £16,424.40 x 7.72 = £126.796].

**Cost per person is £126.80 plus land costs and VAT.**

### **Calculation of Sports Hall Contributions**

Sport England demand estimator suggests 0.23 courts per 1000 population based on 2001 Census breakdown for Milton Keynes. [6.31 courts for 28,000 population]

Area of four court sports hall [Sport England (2000) *Sports Halls: Sizes and Layouts*] is 33x18x7.6m = 594 sq metres (p 3)].

Add 15 per cent for circulation, reception, changing etc = 683.1 sq m

Area required per 1,000 population is 39.28 sq metres

Cost of provision [MK figures] at £1,187 per sq m is £46,272

**Cost per person is £46.27p**

Note: VAT and land costs are not included.

**APPENDIX K**  
**POPULATION TABLES**

## St Albans City and District - Section 106 Analysis - Population Data (Census 2001)

**Table 1: Population breakdown of St Albans City and District by sex and age group**

[illegible]

**Table 2: Population breakdown for St Albans City and District (based on 1000 of the population)**

[illegible]

**APPENDIX L**

**DEMAND MODELLING CALCULATIONS**  
**PER 1,000 POPULATION**

## Demographic Profile - 2001 Census



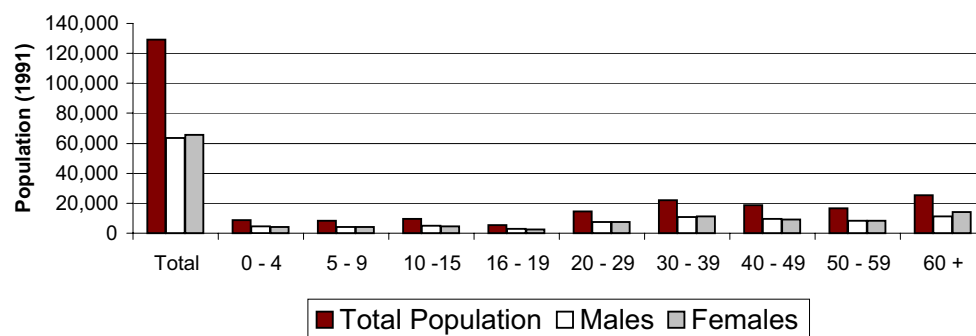
Report for : PMP  
 Defined Area: St Albans District  
 Postcode: N/A

	Results from area	Results as % of area	Results as % of England & Wales	Results as % of GB	From GB % Index (ave. =100)	Index difference	From England & Wales % Index (ave. =100)	Index difference
<b>Total Population</b>	129,126	100	100.0	100	100	0	100	0
0 - 4	8,717	6.8	6.0	5.7	118	18	113	13
5 - 9	8,321	6.4	6.4	6.2	104	4	101	1
10 -15	9,544	7.4	7.8	7.8	95	-5	94	-6
16 - 19	5,486	4.2	4.9	4.9	86	-14	87	-13
20 - 29	14,655	11.3	12.7	12.6	90	-10	90	-10
30 - 39	22,000	17.0	15.6	15.6	110	10	109	9
40 - 49	18,608	14.4	13.4	13.8	105	5	108	8
50 - 59	16,652	12.9	12.6	12.6	102	2	103	3
60 +	25,143	19.5	20.8	20.9	93	-7	94	-6
<b>Males</b>								
Total	63,540	49.2	48.7	48.4	102	2	101	1
0 - 4	4,458	3.5	3.0	2.9	118	18	113	13
5 - 9	4,169	3.2	3.3	3.2	102	2	99	-1
10 -15	4,856	3.8	4.0	4.0	95	-5	94	-6
16 - 19	2,811	2.2	2.5	2.5	87	-13	87	-13
20 - 29	7,366	5.7	6.3	6.2	92	-8	91	-9
30 - 39	10,986	8.5	7.7	7.6	112	12	111	11
40 - 49	9,377	7.3	6.6	6.8	107	7	109	9
50 - 59	8,326	6.4	6.2	6.2	104	4	104	4
60 +	11,191	8.7	9.1	9.0	96	-4	96	-4
<b>Females</b>								
Total	65,586	50.8	51.3	51.6	98	-2	99	-1
0 - 4	4,259	3.3	2.9	2.8	118	18	113	13
5 - 9	4,152	3.2	3.1	3.0	106	6	104	4
10 -15	4,688	3.6	3.8	3.8	96	-4	95	-5
16 - 19	2,675	2.1	2.4	2.4	85	-15	86	-14
20 - 29	7,289	5.6	6.4	6.4	89	-11	88	-12
30 - 39	11,014	8.5	7.9	8.0	107	7	108	8
40 - 49	9,231	7.1	6.7	7.0	103	3	106	6
50 - 59	8,326	6.4	6.3	6.4	101	1	102	2
60 +	13,952	10.8	11.7	11.9	91	-9	92	-8
<b>Ethnic Origin</b>								
All White	120,068	93.0	90.9	0.0	N/A	N/A	102	2
White - British	112,047	86.8	87.0	0.0	N/A	N/A	100	-0
White - Irish	2,536	2.0	1.3	0.0	N/A	N/A	155	55
White - Other	5,485	4.2	2.7	0.0	N/A	N/A	160	60
All Black	1,288	1.0	2.3	0.0	N/A	N/A	43	-57
Black - Caribbean	818	0.6	1.1	0.0	N/A	N/A	55	-45
Black - African	352	0.3	1.0	0.0	N/A	N/A	28	-72
Black - Other	118	0.1	0.2	0.0	N/A	N/A	47	-53
Chinese	675	0.5	0.4	0.0	N/A	N/A	116	16

	Results from area	Results as % of area	Results as % of England & Wales	Results as % of GB	From GB % Index (ave. =100)	Index difference	From England & Wales % Index (ave. =100)	Index difference
<b>Ethnic Origin contd</b>								
All Asian	4,208	3.3	4.6	0.0	N/A	N/A	71	-29
Asian - Indian	1,129	0.9	2.1	0.0	N/A	N/A	42	-58
Asian - Pakistani	695	0.5	1.4	0.0	N/A	N/A	37	-63
Asian - Bangladeshi	1,615	1.3	0.6	0.0	N/A	N/A	223	123
Asian - Other	769	0.6	0.5	0.0	N/A	N/A	123	23
Others	593	0.5	0.4	0.0	N/A	N/A	105	5
All Mixed	2,020	1.6	1.3	0.0	N/A	N/A	119	19
White and Black Caribbean	559	0.4	0.5	0.0	N/A	N/A	92	-8
White and Black African	186	0.1	0.2	0.0	N/A	N/A	92	-8
Mixed - White and Asian	694	0.5	0.4	0.0	N/A	N/A	143	43
Mixed - Others	581	0.4	0.3	0.0	N/A	N/A	146	46
<b>Residents who have a limiting long-term illness</b>	15,843	12.3	17.0	17.5	70	-30	72	-28
<b>Economic Activity of Household Residents (aged 16 and over)</b>								
Total	105,641	[total of all economic sub-types]						
In Full-time employment	50,318	47.6	39.0	40.5	118	18	122	22
In Part-time employment	15,420	14.6	12.8	13.1	111	11	114	14
Self employed	9,682	9.2	5.2	5.7	162	62	175	75
Unemployed	1,600	1.5	2.5	3.0	50	-50	61	-39
Students	5,658	5.4	18.3	12.5	43	-57	29	-71
Permanently Sick/Disabled	2,615	2.5	4.3	5.6	44	-56	57	-43
Retired	12,167	11.5	9.9	11.3	102	2	116	16
Other inactive	1,971	1.9	2.5	3.1	61	-39	73	-27
Looking after home/family	6,210	5.9	5.3	5.2	113	13	110	10
<b>Males</b>								
In Full-time employment	32,906	31.1	25.3	26.0	120	20	123	23
In Part-time employment	3,447	3.3	2.7	2.7	121	21	121	21
Self employed	6,834	6.5	3.8	4.1	158	58	170	70
Unemployed	965	0.9	1.5	1.9	47	-53	61	-39
Students	2,612	2.5	9.2	6.1	40	-60	27	-73
Permanently Sick/Disabled	1,319	1.2	2.4	3.0	42	-58	53	-47
Retired	5,336	5.1	4.0	4.5	111	11	126	26
Other inactive	869	0.8	1.1	1.3	62	-38	75	-25
Looking after home/family	260	0.2	0.4	0.4	63	-37	67	-33
<b>Female</b>								
In Full-time employment	17,412	16.5	13.7	14.5	113	13	120	20
In Part-time employment	11,973	11.3	10.1	10.5	108	8	113	13
Self employed	2,848	2.7	1.5	1.6	171	71	179	79
Unemployed	635	0.6	1.0	1.1	54	-46	62	-38
Students	3,046	2.9	9.4	6.5	44	-56	31	-69
Permanently Sick/Disabled	1,296	1.2	2.0	2.6	47	-53	62	-38
Retired	6,831	6.5	6.2	6.9	93	-7	104	4
Other inactive	1,102	1.0	1.4	1.7	60	-40	72	-28
Looking after home/family	5,950	5.6	5.0	4.8	117	17	113	13
<b>Lone Parents</b>								
Total	102,544	[Total of All People aged 16+]						
Male	4,124	4.0	5.6	6.0	67	-33	71	-29
Female	656	0.6	0.8	0.8	80	-20	82	-18
	3,468	3.4	4.9	5.2	65	-35	69	-31

	Results from area	Results as % of area	Results as % of England & Wales	Results as % of GB	From GB % Index (ave. =100)	Index difference	From England & Wales % Index (ave. =100)	Index difference
<b>Tenure of Households</b>								
<b>Total Occupied Household Spaces</b>	52,690							
Owned	40,584	77.0	68.7	65.7	117	17	112	12
Private Rented or Living Rent Free	5,498	10.4	12.0	11.2	94	-6	87	-13
Rented from Council	5,272	10.0	13.2	17.4	58	-42	76	-24
Other Social Rented	1,336	2.5	6.1	5.8	44	-56	42	-58
<b>Car Availability by Household</b>								
with no car	7,862	14.9	26.8	30.5	49	-51	56	-44
with 1 car	22,367	42.5	43.7	43.5	98	-2	97	-3
with 2 cars	22,503	42.7	29.5	26.0	165	65	145	45
<b>Social Class of Head of Household</b>								
<b>Total Head of Household (aged 16+)</b>	100,931							
AB - Higher & Intermediate managerial/admin/professional	40,014	39.6	22.2	20.6	193	93	179	79
Supervisory, clerical, junior C2 - Skilled manual workers	31,162	30.9	29.7	28.1	110	10	104	4
D - Semi-skilled & unskilled manual workers	8,966	8.9	15.1	14.8	60	-40	59	-41
E - On state benefit, unemployed, lowest grade	9,669	9.6	17.0	17.3	55	-45	56	-44
	11,120	11.0	16.0	19.2	57	-43	69	-31

Graph to illustrate population by age and gender.





## Population Projection Report

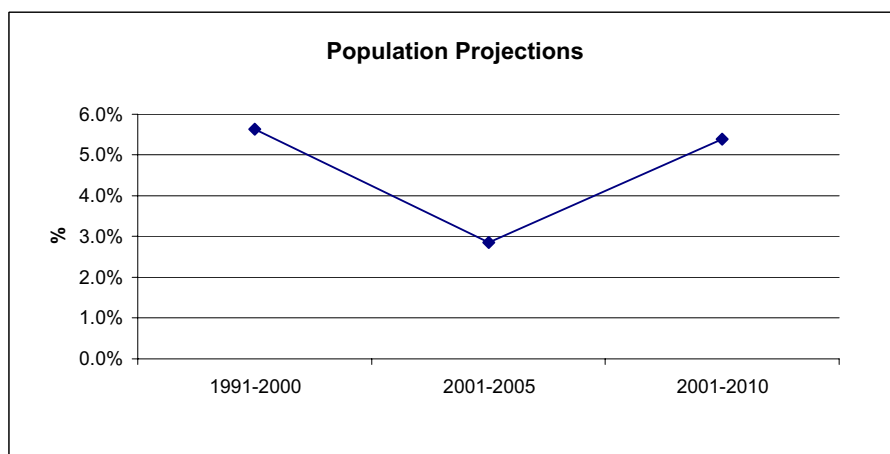


**Report for :** PMP  
**Defined Area:** St Albans District  
**Postcode** N/A

### Data Table:

	Population
1991	121,842
2001	129,126
2005	132,822
2010	136,083

Population Projections	1991-2000	2001-2005	2001-2010
St Albans District	5.6%	2.9%	5.4%
Actual Total Change	7,284	3,696	6,957



Source: 1996 Sub-National Projections. Reproduced by permission of the Office of National Statistics.  
© Crown Copyright

© Mapping the Future™

Note: Some variations may occur in projections due to the changes in postal geography.

MtF Demand Model - Swimming Pools - PART A - DEMAND SIDE

Target Area: St Albans District

Target Site: N/A

Any model is based on a number of assumptions. The assumptions used in this model are as follows:

Assumptions/Parameters used in Model

- ☐ Proportion of visits during peak times = 63%
- ☐ Average duration of visit = 64 minutes (lank), 68 minutes (leisure pool)
- ☐ Normal peak periods = 52 hours per week = 49 peak sessions
- ☐ At one time capacity = 6m<sup>2</sup> per person
- ☐ A one time capacity is defined as the supply/capacity of one m<sup>2</sup> of pool area at any one time
- ☐ Capacity per 212m<sup>2</sup> (1 pool unit) = 35 people. (number of metres squared divided by the at one time capacity of one m<sup>2</sup>)
- ☐ A pool unit is defined as an average four lane, 25 metre pool.

Source: 2004 Sport England

These assumptions are then applied to the population (classified by age and gender) of the target area. Calculated Sport England demand parameters for each category of age and gender are also applied (see the following table).

Demand Assessment Table

Demand in relation to the age and gender profile of the target area is calculated by applying the Sport England parameters to it.

Age group	Population		Rate of participation (%)		Participation numbers		Frequency of participation (per week)		Visits per week		Peak visits (63%)	Comfort Capacity (70%)
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		
0-15	92	102	13.23	12.72	12	13	0.92	0.95	11	12	15	21
16-24	48	53	10.86	14.51	5	8	0.84	0.76	4	6	6	9
25-39	115	122	13.73	18.89	16	23	0.71	0.79	11	18	19	26
40-59	132	142	8.13	10.44	11	15	0.94	0.81	10	12	14	20
60-79	80	77	3.93	4.52	3	3	1.18	1.07	4	4	5	7
Total	467	496			47	62			41	52	58	83

Quantifying Demand

The figure of total visits during peak times is used to calculate the size of a swimming pool needed to serve this demand at any one time.

This is calculated by:

- ☐ dividing the total peak visits by the number of peak sessions(49)
- ☐ divide by the water area required by one person (6m<sup>2</sup> of pool area).

This leaves one number signifying the total demand from the catchment area, measured in square metres of pool.

Standard
2
6
10

Standard

Water area required to meet potential demand/m<sup>2</sup>, in 2001 : 10.22 m<sup>2</sup>

The corresponding demand in 2005 will be : 10.51 m<sup>2</sup>

The corresponding demand in 2010 will be : 10.77 m<sup>2</sup>

Pool Units Required in 2001: 0.048

Pool Units Required in 2005: 0.050

Pool Units Required in 2010: 0.051

A pool unit is equal to: 212 m<sup>2</sup> or a 4 lane 25 metre pool

Note: Demand will change over time in relation to the increase or decrease in resident population.

Demand Sensitivities

The model calculates the total potential demand for swimming and assumes that each pool will operate on average at 70% peak time capacity to provide comfort for users. Once this 70% capacity has been exceeded it assumes that people will choose not to use the pool and either find an alternative pool or not go swimming.

A number of sensitivities have been calculated:

**Capacity** - this is the theoretical pool area to meet the demand for swimming based on current participation rates with the pool operating at capacity during peak times  
This does not allow for the comfort factor (this is the basis on which previous models (FPM and MIF) have been calculated)

**Standard** - this identifies the potential demand for swimming provision and assumes that all barriers to participation are removed. This includes an allowance for a comfort factor and equates to the Sport England Facility Calculator

**Game Plan** - this assumes that the targets in Game Plan are achieved (50% participation in 2010 and 70% in 2020) with swimming increasing proportionately to the increase in participation. This allows for the comfort factor and assumes pools will operate on average at 70% peak time capacity.

Total Peak Visits

Age group	Peak visits (63%)	Comfort Capacity (70%)	Game Plan 2010
0-15	15	21	26
16-24	6	9	11
25-39	19	26	32
40-59	14	20	24
60-79	5	7	8
Total	58	83	101

The figure of total visits during peak times is used to calculate the size of swimming pool provision needed to serve this demand at any one time. This highlights the:

- potential demand for swimming at peak times based on participation rates
- potential demand for swimming at peak times allowing for a comfort factor
- potential demand for swimming at peak times if the targets in Game Plan are achieved

Capacity	Standard	Game Plan 2010
1	2	2
6	6	6
7	10	12

Capacity	Comfort	Game Plan 2010
7	10	
7	11	
8	11	13

Dividing the total peak visits by the number of peak sessions(49)  
divide by the water area required by one person (6m<sup>2</sup> of pool area).  
The total demand from the catchment area, measured in square metres of pool.

**Water area required to meet potential demand/m<sup>2</sup>, in 2001 :**  
The corresponding demand in 2005 will be :  
The corresponding demand in 2010 will be :

0.0	0.0	
0.0	0.0	
0.0	0.1	
Pool Units Required in 2010 (Game Plan adjusted) :		
		0.1

A pool unit is equal to: 212 m<sup>2</sup> or a 4 lane 25 metre pool

MtF Demand Model - Sports Halls - PART A - DEMAND SIDE



Target Area: N/A

Target Area: St Albans District

Any model is based on a number of assumptions. The assumptions used in this model are as follows:

Assumptions/Parameters used in Model:

- ☐ Proportion of visits during peak times = 60%
- ☐ Average duration of visit = 1 hour
- ☐ Normal peak periods = 40.5 hours per week
- ☐ At one time capacity = 5 people per badminton court

These assumptions are then applied to the population (classified by age and gender) of the target area. Calculated Sport England demand parameters for each category of age and gender are also applied (see the following table).

Demand Assessment Table

Demand in relation to the age and gender profile of the target area is calculated by applying Sport England demand parameters to it.

Age Group	Population		Rate of Participation (%)		Participation Nr's		Frequency of participation (per week)		Visits per week		Peak Visits (60%)	Comfort Capacity (80%)
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		
0-15	92	102	9.55	6.03	9	6	0.85	0.99	7	6	8	10
16-24	48	53	15.04	9.31	7	5	0.88	0.85	6	4	6	8
25-34	72	77	14.96	11.66	11	9	0.88	1.03	9	9	11	14
35-44	79	85	11.08	9.40	9	8	0.90	0.90	8	7	9	11
45-59	95	102	5.68	5.40	5	6	0.92	1.02	5	6	6	8
60-79	80	77	5.55	4.28	4	3	1.10	1.27	5	4	5	7
Total	466	496							41	37	47	58

Quantifying Demand

The figure of total visits during peak times is used to calculate the size of a sports hall needed to serve this demand at any one time.

This is calculated by :

- ☐ dividing the total peak visits by the number of peak sessions (40.5) :
- ☐ divide this number by the average number of people that play on a badminton court (5) :

This leaves one number signifying the total demand from the catchment area, measured in badminton courts.

Current

No of badminton courts demand in 2001 0.287 courts  
The corresponding demand in 2005 will be: 0.295 courts  
The corresponding demand in 2010 will be: 0.303 courts

Number of four court sports halls required in 2001 is: 0.072  
Number of four court sports halls required in 2005 is: 0.074  
Number of four court sports halls required in 2010 is: 0.076

Note: Demand will change over time in relation to the increase or decrease in resident population.

Standard	1
	5
	0.3

Demand Sensitivities

The model calculates the total potential demand for sports halls and assumes that each hall will operate on average at 75% peak time capacity to provide comfort for users and types of activity. Once this 75% capacity has been exceeded it assumes that people will choose not to use the hall and either find an alternative hall or not participate in activity.

A number of sensitivities have been calculated:

**Capacity** - this is the theoretical sports hall area to meet the demand for hall based activities based on current participation rates with the hall operating at capacity during peak times. This does not allow for the comfort factor (this is the basis on which previous models (FPM and MIF) have been calculated).

**Standard** - this identifies the potential demand for sports hall provision and assumes that all barriers to participation are removed. This includes an allowance for a comfort factor and equates to the Sport England Facility Calculator.

**Game Plan** - this assumes that the targets in Game Plan are achieved (50% participation in 2010 and 70% in 2020) with sports hall activities increasing proportionately to the increase in participation. This allows for the comfort factor and assumes halls will operate on average at 75% peak time capacity.

Total Peak Visits

Age group	Peak visits (60%)	Comfort Capacity (80%)	Game Plan 2010
0-15	8	10	12
16-24	6	8	10
25-34	11	14	17
34-44	9	11	14
45-59	6	8	10
60-79	5	7	8
Total	47	58	70

The figure of total visits during peak times is used to calculate the size of sports hall provision needed to serve this demand at any one time. This highlights the:

- potential demand for sports halls at peak times based on participation rates
- potential demand for sports hall at peak times allowing for a comfort factor
- potential demand for sports halls at peak times if the targets in Game Plan are achieved

Capacity	Standard	Game Plan 2010
1	1	2
5	5	5
0	0	0

Dividing the total peak visits by the number of peak sessions(40.5) divide this number by the average number of people that play on a badminton court (5) : The total demand from the catchment area, measured in badminton courts.

Capacity	Standard	Game Plan 2010
0	0	
0	0	
0	0	0

**No of badminton courts demand in 2001**  
The corresponding demand in 2005 will be:  
The corresponding demand in 2010 will be:

Number of four court sports halls required in 2001 is	0.1	0.1
Number of four court sports halls required in 2005 is	0.1	0.1
Number of four court sports halls required in 2010 is	0.1	0.1

# MtF Demand Model - Health and Fitness - PART A - DEMAND SIDE

## FORECAST

Target Area: St Albans District

Target Site: N/A



### Generic Assumptions Used in the Model

- ☐ The model defines health and fitness users as all people participating in health and fitness, including private club members, users of local authority facilities, home users.
- ☐ The model is based on the premise that for the supply to be sufficient, it must be large enough to cater for the maximum demand at any one time.
- ☐ Maximum demand is described as the demand during a peak hour/session.
- ☐ Penetration of health and fitness users is defined using results from MtF's Sport and Leisure Potential Report.
- ☐ This report is derived from a representative sample of nearly 1 million people who completed a survey, a significant number of which reside within the target area. The penetration rate is therefore dependent upon the character of people in the target catchment area.
- ☐ A figure of 19.7% penetration was attained for GB as a whole. This is a current figure and does not take into account market trends in health and fitness.
- ☐ A reduction of 10% in the demand for stations is assumed to represent the proportion of health and fitness users who do not use gyms, including 'home' users, etc. The reduction is subtracted at the end of the model calculations.

### Parameters Used in the Model

- ☐ A potential penetration rate of 24.3% will be used. This figure was obtained from the Sport and Leisure Potential Report for this target area. It includes **all** health and fitness users (from home gym users to members of private health and fitness clubs)
- ☐ The average health and fitness session is one hour
- ☐ 65% of use is during peak times
- ☐ Peak times are 5-9pm Monday to Friday and 9am-5pm weekends (36 hours in a week).
- ☐ The average user participates on average 1.5 times per week or six times a month.
- ☐ The at one time capacity of a health and fitness facility is calculated by the ratio of one user per station.

### The Calculations Used to Calculate Demand (2001)

Total Adult Population = 699 (Aged 15 to 69 years)  
 Number of Potential members/users of health and fitness clubs = 24.3% of total adults = 170  
 Number of visits per week = potential members/users \* 1.5 = 255  
 Number of visits per week in peak times = 65% of total number of visits = 166  
 Number of visits in one hour of peak time = total visits during peak times / 36 = 5  
 Reduce figure by 10% to account for non gym users = 5

A total number of 5 stations would be required to cater for the predicted demand by potential members/users of any health and fitness facility.

### Quantifying Demand - demand changes over time as a result of changes in resident population.

In 2001 there will be a demand for : 4.50 stations  
 In 2005 there will be a demand for : 4.63 stations  
 In 2010 there will be a demand for : 4.74 stations

NB. Market trends have not been considered at this stage.

**APPENDIX M**

**SPORT ENGLAND DESIGN GUIDANCE NOTES**

Please copy as required



Audit sheet title:

Consider people with:    hearing impairment    learning disability    mobility impairment    visual impairment

Question number	Additional comments

Project/facility:

Ref:

Date:



**Audit sheet title:**

**Consider people with:**    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

<b>Question number</b>	<b>Additional comments</b>

**Project/facility:**

**Ref:**

**Date:**

**Consider people with:**    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

<b>Minimum requirements</b>	<b>Yes</b>	<b>No</b>	<b>Action required/comments</b>
See page 8	✓	X	Please read both sides of this sheet
<b>1 Can people access the facility safely and conveniently by:</b> <ul style="list-style-type: none"> <li>• public transport?</li> <li>• on foot?</li> <li>• wheelchair?</li> <li>• bicycle?</li> <li>• car/taxi?</li> <li>• coach/minibus?</li> </ul>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	
<b>2 Does clear and logical signage indicate routes to the facility from the public highway/public footpaths?</b>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>3 Does clear and logical signage indicate routes to:</b> <ul style="list-style-type: none"> <li>• car parking areas?</li> <li>• accessible car parking areas?</li> <li>• drop-off point?</li> <li>• principal entrance to the facility?</li> </ul>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	
<b>4 Is the drop-off point:</b> <ul style="list-style-type: none"> <li>• immediately adjacent to the main entrance? If not, what is the distance from the main entrance?</li> <li>• sheltered?</li> <li>• long enough to allow tail loading?</li> </ul>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	

Date:

**Consider people with:**    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

**Project/facility:** \_\_\_\_\_ **Ref:** \_\_\_\_\_ **Date:** \_\_\_\_\_

# Car parking

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements See page 8	Yes ✓	No X	Action required/comments Please read both sides of this sheet
<b>Note:</b> A car is essential for many disabled people to access sport and leisure facilities. It is vital to provide suitable parking with unhindered access to the entrance.			
1 Are there sufficient dedicated accessible car parking spaces appropriate for the scale and type of facility? (See Table 2 on page 9)	<input type="checkbox"/>	<input type="checkbox"/>	
2 Are the dedicated bays logically grouped together and clearly signposted from the site entrance?	<input type="checkbox"/>	<input type="checkbox"/>	
3 Are the dedicated bays correctly laid out and clearly marked with access symbols on the parking surface?  • Are there vertical signs? (See Figure 1 on page 9)	<input type="checkbox"/>   <input type="checkbox"/>	<input type="checkbox"/>   <input type="checkbox"/>	
4 Are the accessible bays located as close as possible to the main entrance of the facility?  • What is the distance to the facility?  • Is the route covered?  • Are there seats en route?	<input type="checkbox"/>   <input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>   <input type="checkbox"/>  <input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

# Car parking

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements (continued)	Yes ✓	No X	Action required/comments (continued)
5 Is the car park surface smooth and even?	<input type="checkbox"/>	<input type="checkbox"/>	
6 Are there dropped kerbs to all route ways, with appropriate tactile warnings to indicate crossing points?	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

# Changing areas – general

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements See page 31	Yes ✓	No ✗	Action required/comments Please read both sides of this sheet
<p><b>Note:</b> A well-designed layout is critical to ensure maximum access. Careless layout can reduce people's independence and, at worst, prevent use of the facility.</p>			
1 Do the changing facilities meet the requirements set out in Table 8?	<input type="checkbox"/>	<input type="checkbox"/>	
2 Does the layout of the changing area allow sufficient space for a wheelchair user to move freely without obstructing other users?	<input type="checkbox"/>	<input type="checkbox"/>	
3 Can the changing area accommodate a team of athletes in wheelchairs?	<input type="checkbox"/>	<input type="checkbox"/>	
4 Is there direct access from the changing area to the shower area?	<input type="checkbox"/>	<input type="checkbox"/>	
5 Is there suitable toilet provision in close proximity?	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

## Changing areas – general

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements (continued)	Yes ✓	No X	Action required/comments (continued)
6 Are individual accessible changing cubicles provided for those who prefer more privacy?	<input type="checkbox"/>	<input type="checkbox"/>	
7 Are the changing benches a minimum width of 450mm, with a smooth surface, and set at a height of 480mm?	<input type="checkbox"/>	<input type="checkbox"/>	
8 Are changing mats available?	<input type="checkbox"/>	<input type="checkbox"/>	
9 Are alternate coathooks positioned 1050 and 1400mm above floor level?	<input type="checkbox"/>	<input type="checkbox"/>	
10 Are there sufficient lockers? <ul style="list-style-type: none"> <li>• Are at least 10% of the lockers 1200mm high?</li> <li>• Do locks and lockers incorporate tactile numbers?</li> <li>• Are the locks no higher than 1150mm and easy to use?</li> </ul>	<input type="checkbox"/>    <input type="checkbox"/>    <input type="checkbox"/>    <input type="checkbox"/>    	<input type="checkbox"/>    <input type="checkbox"/>    <input type="checkbox"/>    <input type="checkbox"/>    	
11 Are hairdryers, mirrors, drinking fountains and so on, located so that everyone can use them?	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

# Circulation

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

<b>Minimum requirements</b> See page 20	<b>Yes</b> ✓	<b>No</b> ✗	<b>Action required/comments</b> Please read both sides of this sheet
1 Are corridors wide enough for use by wheelchair users?	<input type="checkbox"/>	<input type="checkbox"/>	
2 Are convenient wheelchair turning and passing spaces provided?	<input type="checkbox"/>	<input type="checkbox"/>	
3 Are corridors simple and safe to negotiate? Are they clear of obstructions that could be hazardous to visually impaired people and people using wheelchairs?	<input type="checkbox"/>	<input type="checkbox"/>	
4 Is the circulation area free of unnecessary doors that hinder free movement around the facility?	<input type="checkbox"/>	<input type="checkbox"/>	
5 Are any doors that open onto the circulation area potential hazards?	<input type="checkbox"/>	<input type="checkbox"/>	
6 Is the circulation area free of unnecessary lobbies that hinder free movement around the facility?	<input type="checkbox"/>	<input type="checkbox"/>	
7 Are the lobbies appropriately sized for the facility?	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**



# Circulation

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements (continued)	Yes ✓	No X	Action required/comments (continued)
8 Are all signs visible by people standing and by people using wheelchairs?	<input type="checkbox"/>	<input type="checkbox"/>	
9 Are circulation areas well lit?	<input type="checkbox"/>	<input type="checkbox"/>	
10 Are windows and light fittings located to avoid creation of glare and silhouetting?	<input type="checkbox"/>	<input type="checkbox"/>	
11 Are there visual clues to aid circulation?	<input type="checkbox"/>	<input type="checkbox"/>	
12 Does the colour scheme help differentiate between critical elements, for example the wall from the floor, doors from adjacent walls?	<input type="checkbox"/>	<input type="checkbox"/>	
13 Do wall and floor materials minimise confusing light reflections and provide a suitable acoustic environment?	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

# Doors

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements See page 24	Yes ✓	No ✗	Action required/comments Please read both sides of this sheet
<p><b>Note:</b> Keep the number of doors to the absolute minimum. Wherever possible they should be operated by pushing and pulling rather than by turning a latch.</p> <p>1 Is the door really necessary?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>2 Can the door be held in an open position during normal use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>3 Is the door correctly sized to allow users to pass through freely? (See Table 6)</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>4 Is the door sufficiently glazed to allow people on either side to see each other? (See Figure 14)</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>5 Is the door located to allow 300mm (500mm preferred) on the leading edge to allow approach and use by wheelchair users and by people with limited mobility?</p>	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

# Doors

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements (continued)	Yes ✓	No X	Action required/comments (continued)
6 Is ironmongery positioned to facilitate use by people using wheelchairs and by ambulant people?	<input type="checkbox"/>	<input type="checkbox"/>	
7 Is ironmongery of suitable design and colour?	<input type="checkbox"/>	<input type="checkbox"/>	
8 Where required, is the door closer specified to ensure minimal operating force, never exceeding 20 newtons?	<input type="checkbox"/>	<input type="checkbox"/>	
9 Can people with a visual impairment distinguish the door from the surrounding wall/screen?	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

# Emergency escape

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

<b>Minimum requirements</b> See page 29	<b>Yes</b> ✓	<b>No</b> ✗	<b>Action required/comments</b> Please read both sides of this sheet
1 Does the facility have an escape strategy that reflects the needs of disabled users and staff?	<input type="checkbox"/>	<input type="checkbox"/>	
2 Does the strategy take into account the different uses and users of the building?	<input type="checkbox"/>	<input type="checkbox"/>	
3 Is the strategy regularly reviewed?	<input type="checkbox"/>	<input type="checkbox"/>	
4 Are all ground floor exit routes accessible to everyone?	<input type="checkbox"/>	<input type="checkbox"/>	
5 Is escape from upper levels possible using a fire-protected evacuation lift with associated refuge areas?	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

# Emergency escape

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements (continued)	Yes ✓	No X	Action required/comments (continued)
6 Where an evacuation lift is not available, are designated, suitably sized and located fire-protected refuge areas available?	<input type="checkbox"/>	<input type="checkbox"/>	
7 Are the refuge areas adequately signed for ease of location and protected from improper use, such as storage?	<input type="checkbox"/>	<input type="checkbox"/>	
8 Does the fire alarm system incorporate visible and audible warnings?          • Are there sufficient visible and audible warnings throughout the facility?	<input type="checkbox"/>          <input type="checkbox"/>	<input type="checkbox"/>          <input type="checkbox"/>	
9 Has the Fire Officer been consulted regarding the 'means of escape' proposals with particular reference to use by disabled people?	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

# Entrances

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements See page 16	Yes ✓	No ✗	Action required/comments Please read both sides of this sheet
<p><b>Note:</b> The entrance design should be recognisable, inviting and accessible.</p> <p>1 Is the entrance distinguishable from the facade as a whole?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>2 Are glazed doors and screens highlighted with appropriate manifestations?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>3 Are the entrance doors sited logically in relation to approach routes?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>4 Is the entrance wide enough to accommodate all anticipated user groups, and is it appropriate for the facility type? (See Table 3)</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>5 Is the route to the entrance clear of doors and windows that open out causing hazards?</p>	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

**Consider people with:**    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements (continued)		Yes ✓	No ✗	Action required/comments (continued)
6	Is the entrance threshold level?	<input type="checkbox"/>	<input type="checkbox"/>	
	Is the entrance mat flush to prevent a tripping hazard?	<input type="checkbox"/>	<input type="checkbox"/>	
7	Are door controls/handles easy to see and at a suitable height for people using wheelchairs?	<input type="checkbox"/>	<input type="checkbox"/>	
8	Is the entrance lobby of sufficient size for people to clear the outer door before opening the inner door? (See Table 5)	<input type="checkbox"/>	<input type="checkbox"/>	
9	Does the lobby lighting help people adjust to changes between indoor and outdoor levels of light?	<input type="checkbox"/>	<input type="checkbox"/>	

Date:

# External features

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements See page 12	Yes ✓	No ✗	Action required/comments Please read both sides of this sheet
<p><b>Note:</b> To enable everyone, particularly people with disabilities, to make full use of facilities they need to be able to move conveniently and safely at all times.</p> <p>1 Are traffic routes clearly distinguishable from pedestrian routes? For example, by correct use of layout, colour and texture.</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>2 Are traffic routes clearly signposted?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>3 Do footpaths meet the minimum design requirements set out in Figure 3?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>4 Are footpaths as level as possible, with a maximum crossfall of 1:50 and a maximum gradient of 1:21?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>5 Is the route clear of obstacles or hazards, such as street furniture or gratings?</p>	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**



# External features

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements (continued)	Yes ✓	No X	Action required/comments (continued)
<b>6</b> Are drainage channels located beyond the boundaries of the access route?	<input type="checkbox"/>	<input type="checkbox"/>	
<b>7</b> Are all surfaces: <ul style="list-style-type: none"> <li>• slip-resistant in all weather conditions?</li> <li>• level and even?</li> </ul>	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>	
<b>8</b> Are dropped kerbs provided to all route ways with appropriate tactile warnings to indicate crossing points?	<input type="checkbox"/>	<input type="checkbox"/>	
<b>9</b> Does the route provide help for people with a visual impairment, for example: <ul style="list-style-type: none"> <li>• aural and tactile information?</li> <li>• visual clues?</li> <li>• definition to path edges?</li> <li>• adequate illumination?</li> </ul>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

# External ramps

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements See page 12	Yes ✓	No X	Action required/comments Please read both sides of this sheet
<p><b>Note:</b> Where it is not possible to incorporate a level route, a ramp will enable safe and convenient access for pushchairs and wheelchairs, and for deliveries. However, the ramp must be accompanied by a short flight of steps for those who find negotiating ramps difficult.</p> <p>1 Is the gradient as level as possible? Maximum gradients are:</p> <p>ramp not exceeding 10m    1:20</p> <p>ramp not exceeding 5m    1:15</p> <p>ramp not exceeding 2m    1:12</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>2 Does the ramp provide the necessary clear unobstructed width along its whole length?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>3 Are the landings level, unobstructed and at least 1200mm deep?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>4 Does the ramp have a slip-resistant surface that is firmly fixed and easy to maintain?</p>	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

# External ramps

Consider people with:    hearing impairment    learning disability    mobility impairment    visual impairment

Minimum requirements (continued)	Yes ✓	No X	Action required/comments (continued)
5 Are there handrails to both sides of the ramp that extend by 300mm at the top and bottom?	<input type="checkbox"/>	<input type="checkbox"/>	
6 Are the handrails easily distinguishable from the background?	<input type="checkbox"/>	<input type="checkbox"/>	
7 Does the colour of the ramp's surface contrast with the landings so that people can anticipate it?  <i><b>Note:</b> Do not use corduroy tactile warnings as these indicate the start of a flight of steps.</i>	<input type="checkbox"/>	<input type="checkbox"/>	
8 Is the ramp illuminated to at least 100 lux?	<input type="checkbox"/>	<input type="checkbox"/>	

Project/facility:

Ref:

Date:

# Fixtures and fittings

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements See page 43	Yes ✓	No X	Action required/comments Please read both sides of this sheet
<b>1 Telephones</b> <ul style="list-style-type: none"> <li>detailed and fixed appropriately for use by ambulant people and people using wheelchairs?</li> <li>fitted with an inductive coupler?</li> <li>textphone facility available?</li> </ul>	<input type="checkbox"/>   <input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>   <input type="checkbox"/>  <input type="checkbox"/>	
<b>2 Controls</b> <ul style="list-style-type: none"> <li>logically and consistently located?</li> <li>contrasting colour to the background?</li> </ul>	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>	
<b>3 Induction loops and infrared systems</b> <p>Are they available in the following locations:</p> <ul style="list-style-type: none"> <li>reception counter?</li> <li>meeting rooms?</li> <li>dance and exercise areas?</li> <li>areas where information is given?</li> </ul>	<input type="checkbox"/>    <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>    <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<b>4 Signs</b> <ul style="list-style-type: none"> <li>located logically and consistently? (See Figure 28)</li> <li>easily identified against their background?</li> <li>easily read and understood?</li> </ul>	<input type="checkbox"/>   <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>   <input type="checkbox"/> <input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

Consider people with:    hearing impairment    learning disability    mobility impairment    visual impairment

Minimum requirements (continued)	Yes ✓	No ✗	Action required/comments (continued)
<b>5 Public address system</b>			
<ul style="list-style-type: none"> <li>clear and audible?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> <li>supplemented by visual information?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	

Date:

# Foyer/reception area

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements See page 18	Yes ✓	No X	Action required/comments Please read both sides of this sheet
<b>Note:</b> Layout must be clear and logical. Ideally, there should be a clear view from outside into the reception/lobby area.			
1 Is there sufficient space with defined, unobstructed route ways so that everyone has easy access to the stairs, lift, reception desk, WCs and other facilities?	<input type="checkbox"/>	<input type="checkbox"/>	
2 Is the area well lit and acoustically quiet to allow people to talk at the reception desk, in seating areas, and when using the public telephone?	<input type="checkbox"/>	<input type="checkbox"/>	
3 Is there clear and logical signage, correctly and consistently located to assist people entering the building?	<input type="checkbox"/>	<input type="checkbox"/>	
4 Is the reception counter designed and located to permit use by members of staff and customers who are wheelchair users? (See Figure 8)	<input type="checkbox"/>	<input type="checkbox"/>	
5 Is there a raised area of the counter to enable use in a standing position? (See Figure 8)	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

# Foyer/reception area

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements (continued)	Yes ✓	No ✗	Action required/comments (continued)
6 Is the reception counter positioned so that the receptionist's face is visible to lip readers?	<input type="checkbox"/>	<input type="checkbox"/>	
7 Is the counter fitted with an induction loop and is this clearly indicated by the standard symbol?	<input type="checkbox"/>	<input type="checkbox"/>	
8 Is a suitably installed public telephone provided?	<input type="checkbox"/>	<input type="checkbox"/>	
9 Is an easy to locate seating area provided?	<input type="checkbox"/>	<input type="checkbox"/>	
10 Is there sufficient space for wheelchair users and assistance dogs?	<input type="checkbox"/>	<input type="checkbox"/>	
11 Is a mixture of seating options provided? For example, fixed, removable, with and without arms?	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

# Internal ramps

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements See page 20	Yes ✓	No ✗	Action required/comments Please read both sides of this sheet
<p><b>Note:</b> Wherever possible in corridors, small changes in level should be avoided. Where this is not possible, a well-detailed ramp with an associated short flight of steps should be provided.</p> <p>1 Is the gradient as level as possible? Maximum gradients are:</p> <p>ramp not exceeding 10m    1:20</p> <p>ramp not exceeding 5m    1:15</p> <p>ramp not exceeding 2m    1:12</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>2 Is the unobstructed width of the ramp at least the minimum dimension for the type of facility – 1200mm, 1500mm preferred? In larger facilities may need to be increased to 2000mm.</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>3 Is there a level intermediate landing at least 1500mm long?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>4 Does the ramp have a firmly fixed slip-resistant surface?</p>	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**





# Internal stairs

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements See page 22	Yes ✓	No ✗	Action required/comments Please read both sides of this sheet
<p><b>Note:</b> All stairs and steps must be suitable for use by ambulant disabled people.</p> <p>1 Does the stair have at least 1100mm clear width?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>2 Is the maximum rise of the stair less than 1800mm, with risers no more than 170mm, and treads no less than 250mm?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>3 Are all risers solid?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>4 Is the staircase fitted with suitable continuous handrails on both sides?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>5 Are all stair nosings:</p> <ul style="list-style-type: none"> <li>clearly visible by people going up and down the staircase?</li> <li>correctly detailed?</li> </ul>	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

# Internal stairs

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements (continued)	Yes ✓	No X	Action required/comments (continued)
<b>6</b> Are all surfaces: <ul style="list-style-type: none"> <li>• slip-resistant in all weather conditions?</li> <li>• level and even?</li> </ul>	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>	
<b>7</b> Is each level clearly indicated by tactile and visual information?	<input type="checkbox"/>	<input type="checkbox"/>	
<b>8</b> Is the staircase: <ul style="list-style-type: none"> <li>• easy to locate?</li> <li>• suitably signed?</li> </ul>	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>	
<b>9</b> Are stair and landing surfaces slip-resistant?	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

# Lifts

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements See page 27	Yes ✓	No ✗	Action required/comments Please read both sides of this sheet
<p><b>Note:</b> All lifts should be designed for independent use by a wheelchair user.</p> <p>Platform lifts are only acceptable in a limited number of situations.</p> <p>Stairlifts are not acceptable in a sports facility.</p>			
<p>1 Do the lift and door dimensions at least meet the minimum dimensions appropriate for the scale and type of facility? (See Table 7)</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>2 In front of the lift doors at each level, is there an unobstructed space of sufficient size to allow waiting and manoeuvring by wheelchair users? (See Figure 15)</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>3 Are there appropriate controls in the car and at each floor level?</p> <p>Are the lift controls:</p> <ul style="list-style-type: none"> <li>• correctly located?</li> <li>• with raised markings?</li> </ul>	<input type="checkbox"/>   <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>   <input type="checkbox"/> <input type="checkbox"/>	
<p>4 Is there an audible/voice announcement at each floor level?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>5 Does the emergency telephone incorporate an inductive coupler?</p>	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

**Consider people with:**    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements (continued)	Yes ✓	No ✗	Action required/comments (continued)
<p>6 Is the lift a designated evacuation lift?</p> <p>Does the lift comply with all the necessary requirements of an evacuation lift?</p>	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>	
<p>7 Are there associated refuge areas?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>8 Are all surfaces:</p> <ul style="list-style-type: none"> <li>• slip-resistant in all weather conditions?</li> <li>• level and even?</li> </ul>	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>	
<p>9 Does the lift door closing mechanism have an adequate time delay?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>10 Opposite and adjacent to the lift doors are there raised numerals/letters indicating the floor level?</p>	<input type="checkbox"/>	<input type="checkbox"/>	

Date:

**Consider people with:**    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

**Project/facility:** \_\_\_\_\_ **Ref:** \_\_\_\_\_ **Date:** \_\_\_\_\_

# Management issues

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements (continued)	Yes ✓	No X	Action required/comments (continued)
<p>4 Does the building maintenance manual identify and emphasise the importance of good management in maintaining quality access to the facility?</p> <ul style="list-style-type: none"> <li>Are essential pieces of equipment regularly checked eg induction loops, lifts etc?</li> <li>Is flooring checked to ensure that it is not loose/worn or slippery?</li> </ul>	<input type="checkbox"/>   <input type="checkbox"/>   <input type="checkbox"/>   	<input type="checkbox"/>   <input type="checkbox"/>   <input type="checkbox"/>   	
<p>5 Have the needs of people with hearing impairment been considered in the design and management of the facility?</p>	<input type="checkbox"/>   	<input type="checkbox"/>   	
<p>6 Have the needs of people with learning disabilities been considered in the design and management of the facility?</p>	<input type="checkbox"/>   	<input type="checkbox"/>   	
<p>7 Have the needs of people with mobility impairment been considered in the design and management of the facility?</p>	<input type="checkbox"/>   	<input type="checkbox"/>   	
<p>8 Have the needs of people with visual impairment been considered in the design and management of the facility?</p>	<input type="checkbox"/>   	<input type="checkbox"/>   	

**Project/facility:**

**Ref:**

**Date:**

# Showers

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

<b>Minimum requirements</b> See page 36	<b>Yes</b> ✓	<b>No</b> ✗	<b>Action required/comments</b> Please read both sides of this sheet
1 Does the shower area comply with the critical dimensions in Figure 22?	<input type="checkbox"/>	<input type="checkbox"/>	
2 Are the shower controls easily accessible?	<input type="checkbox"/>	<input type="checkbox"/>	
3 Is the shower area fitted with a tip-up seat and grabrail? (See Figure 22)	<input type="checkbox"/>	<input type="checkbox"/>	
4 Is the shower area free of tripping hazards, such as raised thresholds?	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**



# Showers

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements (continued)	Yes ✓	No X	Action required/comments (continued)
5 Does the shower area have a slip-resistant surface laid to falls to a gully?	<input type="checkbox"/>	<input type="checkbox"/>	
6 Is the area free of complex falls that make standing or manoeuvring difficult?	<input type="checkbox"/>	<input type="checkbox"/>	
7 Are shower chairs available and are they conveniently located? (For swimming pools see Table 10)	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

# Social areas

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements See page 42	Yes ✓	No X	Action required/comments
<b>1 Seating</b>			
• provided at intervals on long internal/external routes, and where waiting is likely?	<input type="checkbox"/>	<input type="checkbox"/>	
• space in seating areas for wheelchair users and guide dogs?	<input type="checkbox"/>	<input type="checkbox"/>	
• stable and easy to rise from?	<input type="checkbox"/>	<input type="checkbox"/>	
• with and without arms?	<input type="checkbox"/>	<input type="checkbox"/>	
<b>2 Vending machines</b>			
• selected and located to be accessible to wheelchair users?	<input type="checkbox"/>	<input type="checkbox"/>	
• clear display panels and instructions?	<input type="checkbox"/>	<input type="checkbox"/>	
<b>3 Servery/counters</b>			
• accessible to disabled users?	<input type="checkbox"/>	<input type="checkbox"/>	
<b>4 Furniture</b>			
• stable but movable to allow maximum access?	<input type="checkbox"/>	<input type="checkbox"/>	
• tables have clear undertop height of at least 700–750mm?	<input type="checkbox"/>	<input type="checkbox"/>	
• clear, logical gangways at least 1200mm wide?	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

# Toilet provision

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements See page 38	Yes ✓	No ✗	Action required/comments Please read both sides of this sheet
<p><b>Note:</b> Everyone should have easy access to suitable toilet facilities. All schemes should incorporate unisex accessible toilet provision. Minimum provision is dependent on the type and scale of facility. (See Table 9)</p> <p>Wherever possible, provide for ambulant disabled people within general toilet provision.</p> <p><b>General provision</b></p>			
<p>1 Is there appropriate toilet provision to meet the needs of disabled users? (See Table 9)</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>2 Is the toilet provision located conveniently close to the entrance, changing areas and sporting facilities?</p> <ul style="list-style-type: none"> <li>What is the maximum travel distance from a facility?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>3 Are lobbies of sufficient size to allow ease of access with the minimum number of doors? (See Table 5)</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>4 Is flooring slip-resistant throughout, with no raised thresholds?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>5 Do the colour schemes of the walls, floors and fittings provide sufficient contrast to make them distinguishable by visually impaired people?</p>	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

# Toilet provision

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

Minimum requirements (continued)	Yes ✓	No ✗	Action required/comments (continued)
6 Is there sufficient manoeuvring space?	<input type="checkbox"/>	<input type="checkbox"/>	
7 Is at least one cubicle suitable for ambulant disabled people?	<input type="checkbox"/>	<input type="checkbox"/>	
8 Are door fittings/locks/light fittings easily accessible and easy to use?	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Unisex accessible provision</b>  <i><b>Note:</b> The layout and dimensions are critical to ensure convenient and safe independent use by disabled users.</i>			
9 Does the layout comply with Figure 24?	<input type="checkbox"/>	<input type="checkbox"/>	
10 Are there unisex toilet facilities of an alternate hand on the same floor?	<input type="checkbox"/>	<input type="checkbox"/>	
11 Is the entrance to the toilet screened to prevent direct views from main public areas?	<input type="checkbox"/>	<input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

# Unisex accessible changing

Consider people with:    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**



Minimum requirements See page 33	Yes ✓	No ✗	Action required/comments Please read both sides of this sheet
<p><b>Note:</b> Dedicated accessible changing areas allow a helper of the opposite sex to provide assistance as well as giving additional privacy.</p> <p>1 Is there sufficient unisex accessible changing provision? (See Table 8)</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>2 Is the changing room close to the sports facility for convenient access?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>3 Does the layout and specification of the changing area comply with the critical dimensions in Figures 18 and 20?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>4 Is the location of the changing room clearly signposted?</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>5 Are there dedicated full-size lockers to enable use by more than one person?</p> <p>• Are they conveniently located?</p>	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>	

**Project/facility:**

**Ref:**

**Date:**

**Consider people with:**    **hearing impairment**    **learning disability**    **mobility impairment**    **visual impairment**

<b>Minimum requirements</b> (continued)	<b>Yes</b> 	<b>No</b> 	<b>Action required/comments</b> (continued)
<b>6</b> Has consultation with user groups indicated a need for permanent hoists?	<input type="checkbox"/>	<input type="checkbox"/>	
<b>7</b> Is the alarm linked to a suitable audible and visible alarm point to enable early recognition of a person in difficulty?	<input type="checkbox"/>	<input type="checkbox"/>	

Date:

# Sports Halls: Design



## Introduction

This Guidance Note covers the design and planning of multi-sports halls and their attendant accommodation. Badminton is the sport which has the most influence over the design of halls and is used as an easy reference to their size as being of 4, 6, 8, 9, 12 or more courts. It is frequently the most popular activity, has the smallest court module and the most critical lighting and background colour requirements. Full details of hall layouts and their sports capacity can be found in a separate guidance note.

For sports halls to be successful they must provide an environment that people enjoy, while at the same time meeting the functional needs of users. It is essential that they have sufficient appeal to compete with shopping malls, restaurants, cinemas and other leisure attractions.

Finally, quality. Sports halls are open for long hours, seven days a week and take heavy wear as a result. It is therefore essential to build a high quality building with good, easily maintained finishes.

It is far better to design a smaller building of the right quality, with potential for later expansion, than a larger building of poor initial quality.



**The sports centre in its setting: interesting building forms invite attention.**

## Site planning

### Location

The shape and contours of the available site will obviously influence the siting of the sports hall and any important ancillary facilities, for example artificial turf pitches or tennis courts. However, in most instances the proximity of an existing access road and/or the necessary main services will be the main factor affecting its location if unnecessary and expensive site development costs are to be avoided. It is essential that the site provides:

- sufficient space for the proposed facility as well as space for future expansion
- adequate car parking provision, including the potential for overspill parking
- access for service and emergency vehicles.

### External planning

Provision should be made for:

- car and coach parking closely related to the main entrance
- disabled bays with ramped curbs
- access and adequate turning provision for service vehicles
- secure cycle standing located within sight of an office or reception
- ramps, if there are changes in ground level, and additional handrailing
- well-lit car parks and footpaths for safe access after dark
- pedestrian routes planned away from areas of potential concealment.

A planting scheme will assist in linking the building to its surroundings and in urban projects can help to create a more welcoming appearance to the entrance environment. Suitably selected shrub planting will provide a barrier to the building face deterring vandalism and giving more privacy and security to glazed accommodation. All new planting will need initial barrier protection.

Planting schemes are covered in detail in a separate guidance note.



## External appearance

Sports halls inevitably use industrial building components and, unless carefully designed, can all too easily look just like another factory or warehouse, an impression that must be avoided.

They are large buildings with few windows and require considerable skill in the selection of materials, use of colour and the general design so that they look attractive and inviting by day and night.

In some locations such as on existing school and college sites, it may be appropriate to use brick cladding, but this too can often lead to a heavy and oppressive character. To summarise, sports halls should have:

- a clearly identified entrance of appropriate scale
- a well-articulated structure
- good signage
- crisply detailed, high quality cladding and roofing materials.

All the above with skilful use of colour and good landscaping will help to create an attractive and welcoming sporting image.



**A small dual-use sports hall with appropriately proportioned main entrance and signage.**

## Hall and centre planning

Different sizes of hall have different support accommodation requirements. They are often combined with other activity spaces, pools, rinks or other leisure facilities when the term hall is subsumed into the general title of a sports or leisure centre.

Each location has its own requirements, but every freestanding sports hall will have:

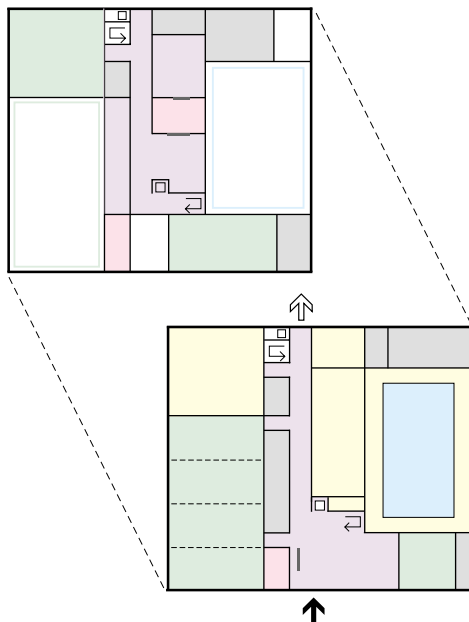
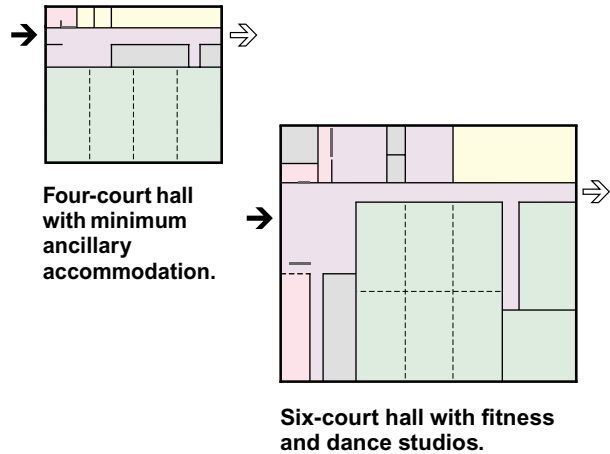
- foyer and reception
- refreshment area
- changing and toilet accommodation
- facilities for disabled people
- office accommodation
- integral equipment storage
- hall viewing with seating
- provision for first aid
- plant room
- cleaner's store.

This is often expanded to include the following model range of accommodation which complements sports halls of all sizes:

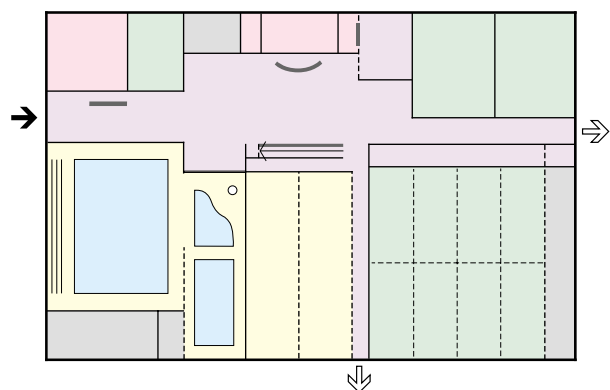
- creche
- club meeting room
- fitness equipment room
- multi-purpose secondary hall or exercise studio
- staffroom
- physio treatment room
- licensed lounge
- all-weather external playing area.

Sports halls must be planned to provide:

- A simple, economical and spacious circulation system that is clearly intelligible to the user and permits easy supervision.
- The elimination of long, narrow corridors that might confuse visitors and impart an institutional image.
- Safe and secure access achieved by design and not by reliance on a closed-circuit television system (CCTV).



**25m pool, four-court hall with social areas and secondary sports space on two levels.**



**Main and learner pools, an eight-court hall and other accommodation planned off a mezzanine circulation spine.**

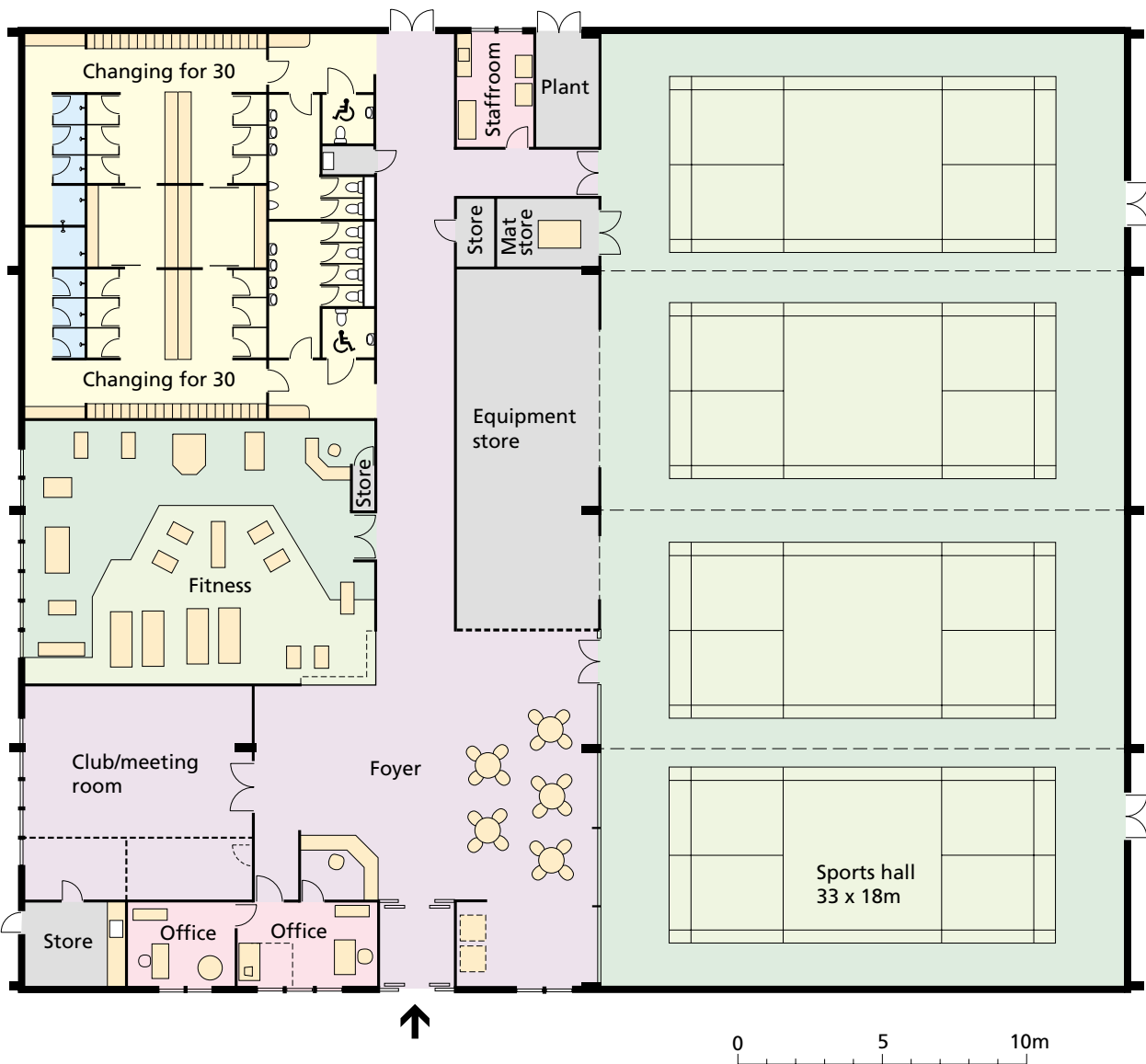
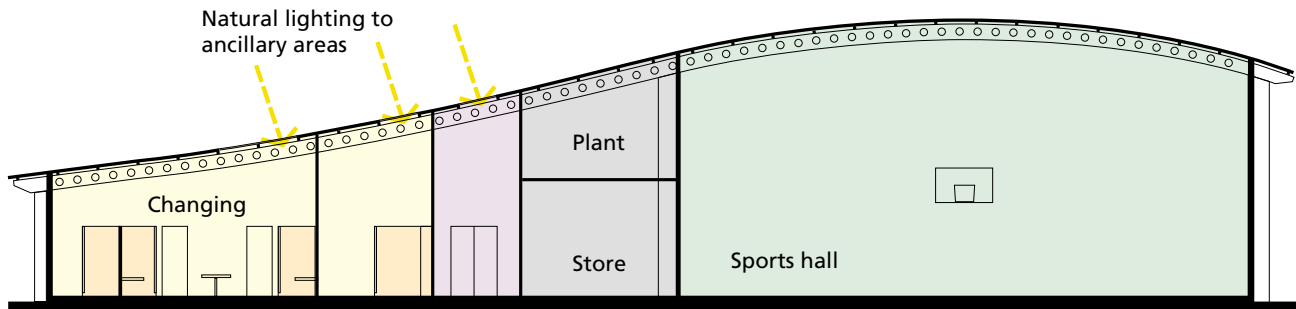
**Block plans illustrating different scales and mixes of accommodation**

The circulation pattern should enforce a sequential progression through the building. The entrance foyer and reception with social-refreshment area leading on to changing and toilets, to activity spaces and then back through changing. The need to backtrack should be avoided except where a conscious decision has been made to rearrange accommodation for a specific purpose such as grouping glazed activity space around the social hub of a centre to allow spectator viewing.

Servicing and plant room access should be remote from the main entrance or arranged on an adjoining elevation with an internal service route direct to kitchen store or bar cellar or into any accommodation that needs to be provisioned for social functions. Plant rooms should be located as close as possible to the most heavily serviced spaces, usually the changing rooms or the deep end of a pool in a wet and dry centre. First aid must have direct or easy access to the building exterior and an ambulance bay.

All levels must be capable of being accessed by the disabled user via a lift or hoist as even the smallest sports hall with a minimum amount of support accommodation will have a floor area of at least 700m<sup>2</sup>. Sports wheelchairs require 1m wide doorsets so the extent of their access routes must be carefully considered at the outset of design and can extend from the hall to changing, toilets and into social areas.

When locating the building on the site, remember to allow space for future expansion when the opportunity exists. The popularity of specific sports and the need for social accommodation will change over the life of the building and past experience shows that sports-dimensional and safety requirements can increase along with user expectations for better equipped and more comfortable support accommodation.



A four-court sports hall with the standard range of accommodation. An interpretation of a popular layout but with the sports hall designed to meet current recommended dimensions, improved changing standards and a larger fitness studio. Alternatively, the club-meeting room space could be developed as a creche, soft play or licensed area.

### Main entrance

Design the entrance area to be warm and welcoming. The entrance foyer is the hub of the building and must have sufficient space and volume for people to circulate, view notices or wait for friends in comfortable surroundings. Design to provide:

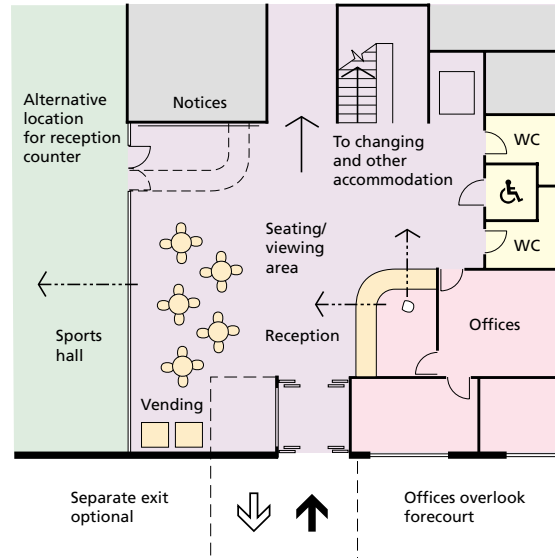
- a convenient and secure store for pushchairs overlooked from reception
- a draft lobby to the main entrance doors
- automatic operation of the main doors which is particularly helpful to disabled users and people with young children.

The management strategy will dictate foyer planning. Options for foyer design include:

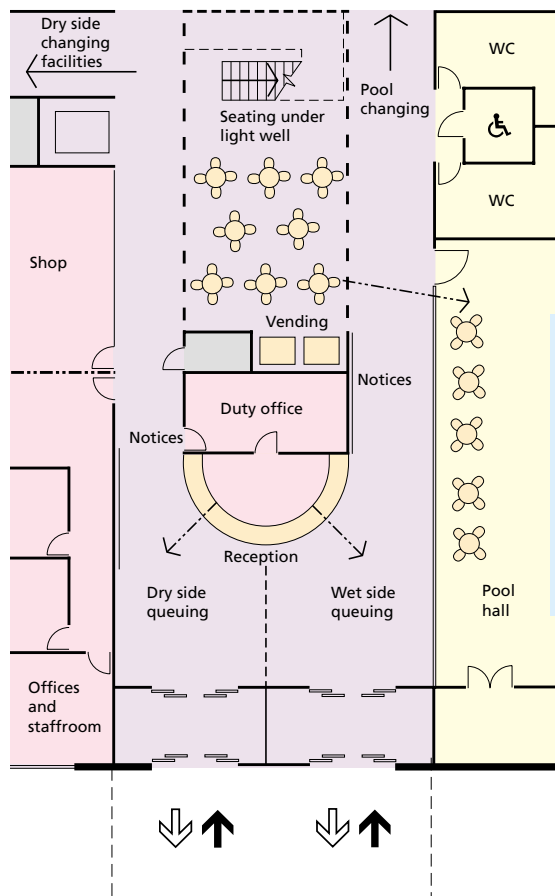
- reception close to the point of entry with sufficient space for queuing
- an informal hotel type arrangement.

The first has the advantage of close control over those entering the centre, the second provides for a more relaxed and welcoming style of operation. In either case the foyer and its associated spaces which can include seating, viewing and refreshment areas, should be designed to be as open and transparent as possible. Natural lighting, most probably from a roof source, will help create the right atmosphere. The volume of space is important — it needs to relate to the volume of the sports hall beyond and low ceiling heights can often make the space feel very tight and unwelcoming.

In dual-use centres it is preferable to separate the main community entrance from the school entrance, so that one is approached directly from the main car park, and the other directly from the school premises. A secondary benefit is that heavy usage of the entrance and associated social area can be reduced, allowing better quality and more attractive finishes to be specified.



**Smaller sports centres.**



**Large centres with a mix of 'dry' and 'wet' facilities. Events centres will have more generous foyers and, where there are ice rinks or other specialised facilities, separate entrances will be provided for peak time admission.**

**Entrance and foyer arrangements**

### Reception and office accommodation

The reception desk should:

- Be prominently sited.
- Be of an open design with a dropped level for wheelchair users and children.
- Incorporate storage for lost property and items for sale or hire.
- Make provision for the monitoring of fire and security systems.
- Allow for possible use of CCTV monitors.

Only in dual-use schemes where club programming predominates is it appropriate for the open reception counter to be replaced with a glazed screen and counter to the staff office.

The reception and office accommodation should be closely linked but in larger centres an island reception may be used to separate the hall from pool or rink users or from spectators. These isolated counters usually require an integral cashing up office.

Whenever possible plan offices to be located on an external wall to allow for daylighting and views over the approach to the building.

The minimum administration required for a small hall or for a school with community sports use is:

- one office for a single occupant plus records storage.

Generally, four-court halls will justify:

- manager's office with meeting space
- general office, unless some administrative functions take place off-site.

Larger centres may include:

- separate catering manager's office
- other specialist accommodation
- restroom
- male and female staff changing.



**Circulation arranged as a central street. Ideal for centres of all sizes, offering clear access, easy supervision and viewing of sports spaces.**



**Reception leading directly in to a central foyer and refreshments area – the most welcoming introduction to a sports centre.**

### Social and viewing areas

Every sports hall should be capable of being viewed from social accommodation and every hall with public use, including those on school sites, must have some social and refreshment accommodation. The simplest answer is to extend the foyer to include a seating area overlooking the hall through safety glazing fitted with blinds or a curtain to avoid distracting badminton players or other user groups. Two or three vending machines with adjacent storage are often sufficient for small halls but an alternative is to extend the reception counter for staff to serve drinks and snacks.

Cafe areas should be:

- Located in or close to the entrance foyer to enhance the welcoming ambience and to enable the centre to benefit from customer secondary spend.
- Designed to ensure that standards of decor match successful high street equivalents.

In large centres they can be grouped together and will include:

- a bar and lounge
- viewing into the hall and other areas.

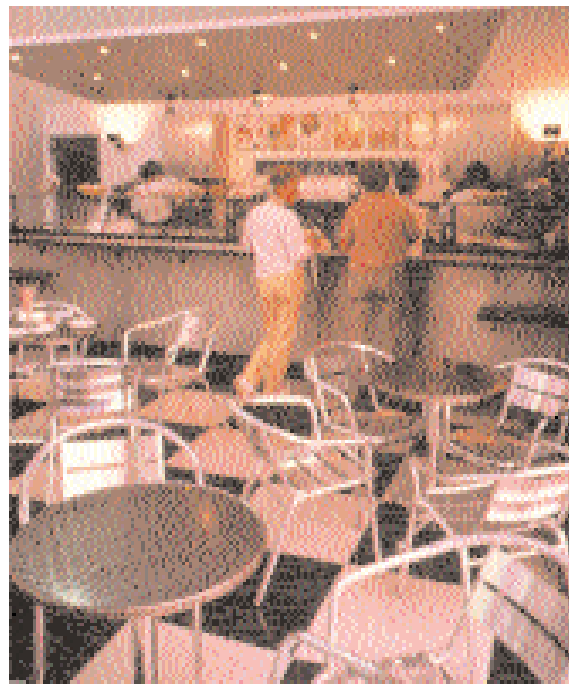
Where it is not possible to accommodate these facilities at ground floor level, the social areas must be visible from the foyer and linked to it with a prominent staircase set in a generous well. It is most important that this relationship is emphasised and that the social content is not tucked away in a remote corner of the building. Support accommodation will include:

- Storage and servery areas serviced from a nearby vehicle delivery point.
- Proper refuse storage and containment.
- If there is a licensed area separate cellarage will be needed and a physical form of segregation may be required.

Viewing of sports halls and other activity areas provides added interest to the social content and assists in breaking down the cellular characteristics common to many older sports buildings. These benefits have to be reconciled with the privacy needs of some occupants so open galleries should be capable of being shut off and glazed screens must be fitted with curtains or blinds.



**A social and games area attached to the entrance foyer with excellent views of the sports hall.**



**A well-furnished and suitably equipped refreshments area: an attractive image for the leisure environment.**



## The sports hall

### Design

The hall is a functional space with stipulated court and safety margin dimensions and with unobstructed clear height requirements.

- Surfaces must be flush and of a consistent colour — there is no scope for applied design features. A successful interior must rely on a careful selection of materials, colours and lighting.
- Natural lighting invariably contributes to the hall's ambience but a suitable system will be expensive and difficult to reconcile with sports lighting requirements, particularly those of badminton. This subject is covered in detail in a separate guidance note.

### Structure

- Columns and beams must be laid out so that they run between the badminton courts. This allows the beams to carry light fittings between the courts and the hanging of division netting.
- Columns can be within, or partly within, external walls or outside the building envelope. They must never project into the hall.
- Additional structure may be required to support specific items of fixed equipment.
- Curved cellular beams are an economical form of roof structure and provide an elegant and functional interior by enabling the avoidance of a ridge.
- Z-purlins should be avoided when possible in favour of a deck spanning between the main beams. When Z-purlins are used they must be painted white to blend with the roof decking.



An area elastic beech floor, walls of the right reflectance value and compact fluorescent lights between badminton courts provide an excellent sports hall environment.



Radius'd steel cellular beams and a structural ceiling liner give this sports hall an uncluttered appearance.

## Floor

An area elastic floor is the critical element in providing a comfortable and safe place in which to play sport. Halls may also be used for non-sports purposes so the choice of finish must suit a range of functional and aesthetic requirements.

- An impact, energy absorbing floor as defined in British Standard 7044 (Part 4) is essential for sports use.
- Semi-sprung beech, beech veneer and various composition and synthetic surfaces can meet the criteria set out in the British Standard.
- Colour should contrast with the walls and be of 40%—50% reflectance value.
- Roller skating makes particular demands on floor finish specification and hardwood surfaces must be laid with support under all board joints. Street skates should never be worn in the hall.

This subject is dealt with in detail in a separate guidance note.

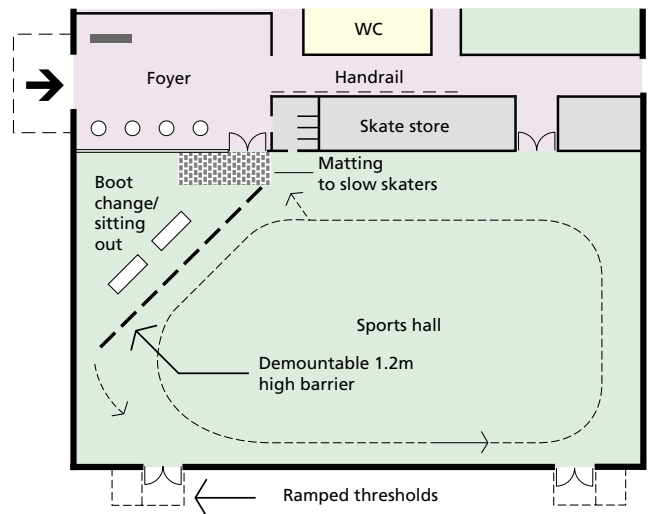
## Internal walls

The walls should be flush-faced and impact-resistant internally. Options include:

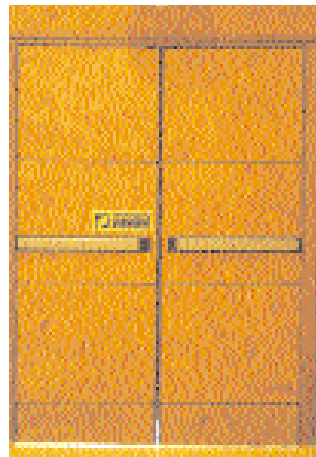
- sanded orientated strand board
- plywood and fairfaced brick
- painted blockwork.

Whatever material is selected it must be run full height as horizontal changes in material cause visual obstruction to badminton players and can result in a stepped back surface.

- A diaphragm wall construction can be used in all masonry solutions.
- The reflectance value must be around 50% to give sufficient contrast to a white shuttlecock but not so dark as to result in an oppressive interior.
- The wall colour should contrast with the floor and be uniform across the wall plane.
- Include a 150mm skirting designed for easy replacement if roller skating is a user sport.
- Doors and door frames must be flush with the internal surface. Escape doors require panelling above and below the crash bar.
- Never locate climbing walls in the sports hall, they require a dedicated space.



Roller skating requires the entry zone of the hall to be sectioned off to create a skate change and sitting out area. Other requirements are a skate hire issue store and a music system.



Hall walls must be detailed for safety and without protrusions. A panelled treatment helps to integrate the door and wall surfaces. This example of an escape door has neat push pads instead of the usual panic bar.



Pulley ropes and bagged nets must be located above shoulder height. The adjoining sliding/folding store doors create a 4m-wide opening and are neatly detailed.



## External walls

When selecting materials for external walls consider the following points:

- Successful external claddings can include colour-coated steel. Where profiled metal is used this looks better when run horizontally.
- Cedarboarding can be appropriate, is cheaper than metal cladding and requires no maintenance.
- Metal cladding used above brickwork at a lower level invariably gives a very industrial appearance and should be avoided.
- External windows and door frames must be in powder-coated aluminium or galvanised steel, UPVC or hardwood.

## Roof

The roof soffit and structure should:

- Be a uniform colour, preferably white with a 90%+ reflectance value.
- Make provision for acoustic absorbency. Reverberation time should not exceed two seconds at mid-frequency.
- The roof decking should span the main beams to achieve minimum visual obstruction.
- Internal linings or suspended ceilings must be impact-resistant.
- Suspended ceilings are generally inappropriate for sports halls.
- Mill-finish standing seam aluminium is likely to provide the best value for money for most sports buildings and can be curved, avoiding interruption of the ridge.



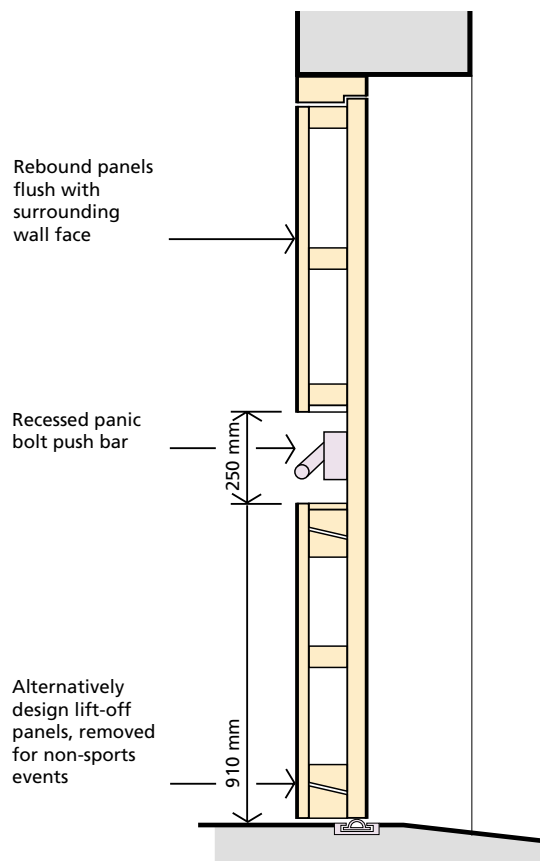
Galvanised steel columns and cedarboard cladding contribute to this interesting, low maintenance sports centre exterior.

- Where the location demands a slate or tile roof the better quality pressed steel sheet products can provide a convincing appearance for buildings of this scale without the weight penalty of the genuine product.

## Fittings

The hall will be equipped with:

- wall- or ceiling-mounted hinged basketball goals with additional practice goals fixed directly to the wall
- roof structure-mounted spotting rig for gymnasts and tracked division netting
- floor and possibly wall sockets with flush-fitted cover plates will be required for specific items of equipment
- pulley-mounted net bags
- spotting rig duct to permit unobstructed wall planes at below 2m height.



Escape doors must be panelled out to line through with the wall surface. The bottom 1.2m is part of the five-a-side football rebound zone and a flush facing is essential for overall safety.



**Natural lighting creates the best daytime environment but light sources must be concealed or screened especially for badminton.**



**Wall colour should have a reflectance value of around 50% as shown in these trial panels. Only halls specialising in table tennis or dedicated badminton centres will benefit from a darker background.**



**A successful sports hall interior with walls of masonry block and a slatted timber band for sound control. All these materials have around 50% reflectance value.**

## Equipment storage

### General

Adequate storage space of suitable proportions, sited in the correct location, is essential for the efficient operation of multi-sports halls.

- A total of 12.5% of the hall floor area is required as a minimum for sports equipment. Community-use school halls and large events halls might require more for furniture and specialised fittings.
- Locate storage on the long side of four-court halls or, where this cannot be achieved, split stores into two areas according to the pattern of hall use.
- In larger halls locate storage where it can efficiently serve subdivided play areas.
- Stores must have easy access from the hall with wide door openings.
- Up-and-over, sliding, folding and side-hung doors can be considered and must be detailed to resist impact damage and to be free from projections.
- Wide-leaf, side-hung panels usually require a steel frame.
- A store depth of 5m is preferred for end-on storage of goals but excessive depth restricts entry and increases handling difficulty.
- A separate racked store may be required for roller skate hire. It should be located next to the sports hall entrance.

### Mat storage

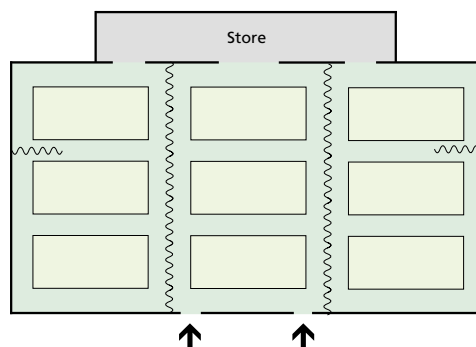
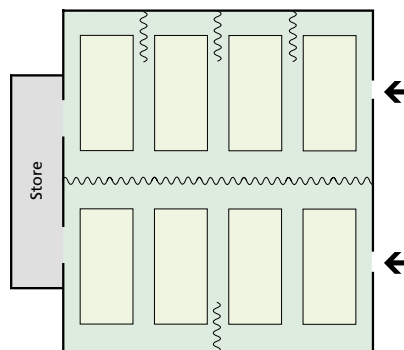
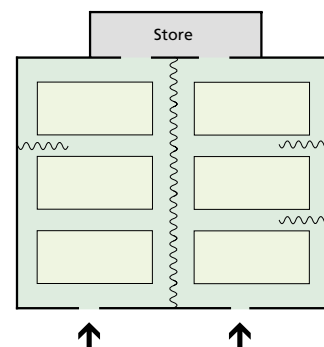
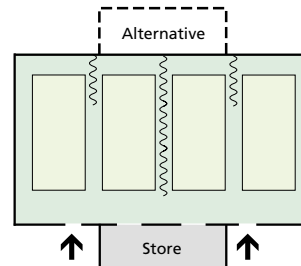
Mats require a separate one-hour fire-rated enclosure vented to the external air and equipped with a smoke detection system. Maximum use can be made of the available space by storing the mats on a purpose-made trolley, which can be pulled out for safe and easy access. Mats usually measure 2 x 1m.

### Special events

Extra large external doors will be required for additional large items of sports equipment, and mobile seating and so on for competitions and exhibitions. Bleacher fold-out seating should be considered for halls with six or more courts, located in wall recesses so as to retain a flush rebound surface.

### Schedule of loose equipment for a typical four-court hall

Badminton	4 sets posts, 4 nets, 2 spare nets
Bowls	4 short mat carpets, rolled, each 1.83 long x up to 0.5m diameter
Five-a-side football	1 pair portable goals with anchor points, each 5 x 1 x 1.2m
Handball	1 pair goals, each 3 x 2m
Hockey	1 pair goals, each 3 x 2m
Gymnastics	range of apparatus with anchorage points and floor mats
Judo/karate	mats, each 2 x 1m (one 14x14m matted area requires 98 mats)
Trampoline	2 trampolines, folded, each 3.040 long x 2.300 wide x 2.220m high
Netball	1 pair adjustable posts, each 3.05m high
Table tennis	6 tables, folded, each 1.855 x 1.830 x 0.65m, nets and supports
Team benches	2



**Location of equipment stores:** it is important to site stores where they are accessible from both sides of a subdivided hall and clear of wall-hung equipment. A less convenient alternative is to provide separate stores to each end of the hall. Either way, store doors and their ironmongery must be sufficiently robust to withstand frequent body and ball impact.



### Fitness equipment room

A complementary space in most halls. The minimum practical floor area is 25m<sup>2</sup>, and 80—100m<sup>2</sup> is the norm for small sports centres, with a preferred ceiling height of 3.5—4m.

Larger centres might devote considerably more space to fitness training, often combined with an exercise studio, integral office—reception, cubicle changing, sauna, spa pool and lounge. Separate guidance notes deal with these subjects in more detail.

Fitness rooms benefit enormously from having windows or roof-lights but for ground floor locations it is advisable to provide external screening for privacy. These spaces also benefit from increased volume. Mechanical ventilation or air-conditioning is always required. Glazed panels to social or circulation space help to open up and promote these activities but all glazing, external and internal, must be fitted with blinds or curtains.

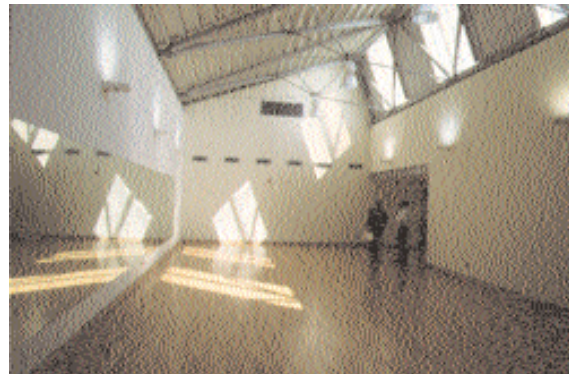
### Secondary halls

Any multi-activity space that is complementary to the main sports hall. Secondary halls can range in size from 10 x 10 x 3.5m high for judo, martial arts and social use, to areas of equivalent size but lower specification than the main hall, suitable for team games, exhibitions and wet weather social events. The potential for social use will be enhanced by ease of servicing which can result in adjoining catering or bar space. Equipment storage should be a minimum of 10% of the hall area.

Dance and exercise studios fall within this category with minimum recommended dimensions of 15 x 12—15 x 4.5m high. Windows should be at high level and admit only north light. Flexible use of space can be achieved by including two or more squash courts with sliding division walls.



**Fitness equipment rooms should be designed with some natural lighting wherever possible but privacy screening will be required in some locations.**



**Secondary halls have similar flooring requirements to main halls and benefit from increased height. Natural lighting contributes to the success of these spaces but must be able to be blacked out.**



**Glazed ceramic tiling offset with strong colours and beech changing benches give a bright and clean impression.**

## Changing areas

Changing areas often attract criticism in facilities that would otherwise be well received.

- Always use high quality, easily cleaned materials to give an immediate impression of hygiene and cleanliness.
- Ceramic tiles must be used on all wall surfaces in showers and changing rooms, with slip-resistant ceramic tiles on the floors.
- Whenever possible changing areas should be equipped with high ceilings and roof-lighting. Note that clerestory windows and suspended ceilings are vulnerable to vandalism.

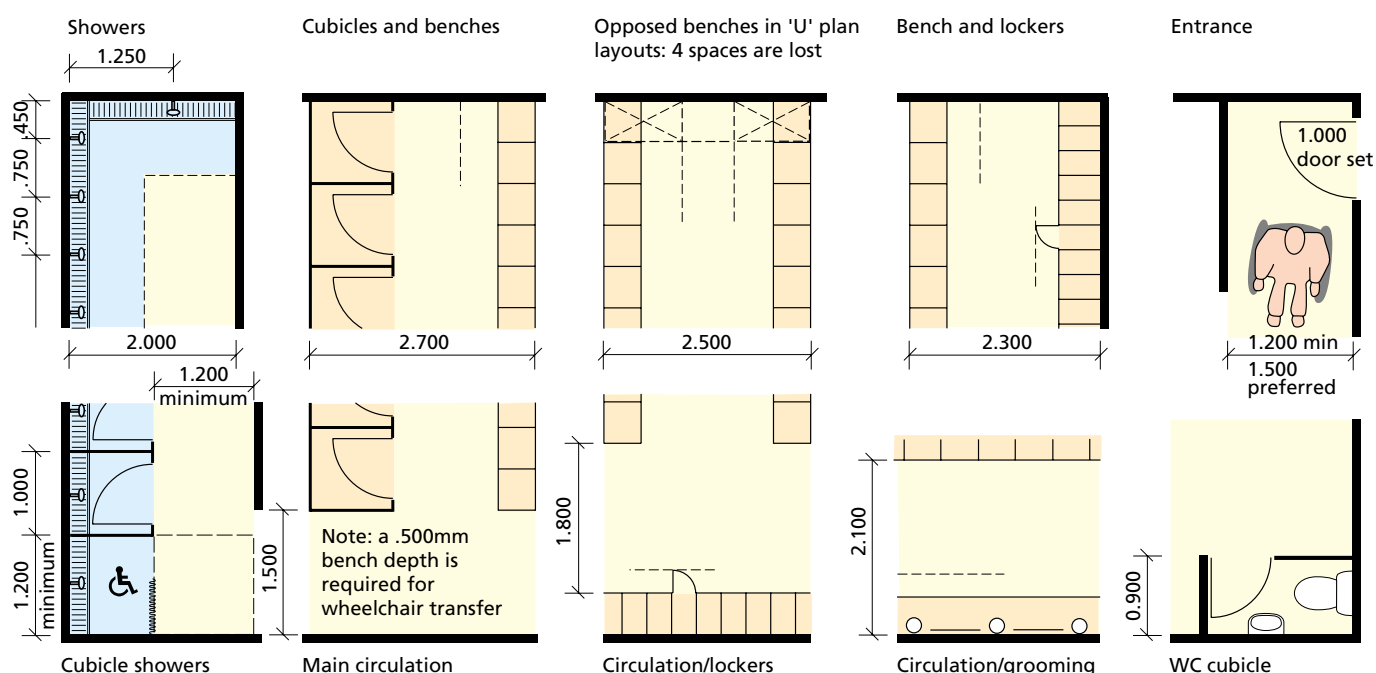
## Changing capacity

- This should be provided according to the number of badminton courts x 2 for changeover. This calculation can be exceeded where there is schools use and the need to provide for two or more classes, and in stand-alone halls where extra spaces are required for single sex activities such as keep fit or aerobics.

- Allow  $0.9\text{m}^2$  per person with a  $0.5\text{m}$  bench run in open changing areas and more where cubicles are provided or where disabled provision is incorporated in the general area.
- Fitness equipment rooms require one changing space per  $5\text{m}^2$  of floor area.
- Aerobics studios and other ancillary halls require one space per  $5\text{—}10\text{m}^2 \times 2$  for overlap.
- Squash courts require four spaces per court.

Layouts should:

- Accommodate different ratios of males/females with buffer or individual changing units as required.
- Ideally, provide a proportion of cubicles for male and female customers who require privacy.
- Be accessible to wheelchair users.
- Be equipped with privacy screening or lobbies.



Changing rooms and showers: some key minimum dimensions.

All-weather pitches can share indoor changing with enhanced capacity but grass pitches must have separate provision with field exits and boot cleaning facilities. The design of pavilions and clubhouses is covered in more detail in a separate guidance note.

### Showers

- Allow one shower point to every six changing spaces. Provide a separate dry-off area and include a proportion of cubicle showers.
- Shower outlets should be at 750mm centres with 450—500mm between end fittings and side walls. Fittings carried around an internal corner should maintain these minimum standards.
- Showers on opposing walls should be spaced 2.5m apart to permit a central circulation route and will require a separate dry-off area to one end.

### Clothes storage lockers

- Allow 2.5 times the assessed occupancy levels for changing.
- Locate lockers in changing rooms to offer maximum convenience for users.
- Typically, lockers are 500mm deep and 300mm wide and arranged in columns 1.8m high.
- Behind bench lockers save space but are inconvenient at times of peak use.

### Disabled users

Minimum provision is a dedicated disabled changing room with toilet and shower area, accessed from the main circulation, that allows the disabled user to be assisted by a helper of the opposite sex. Additionally, disabled users needs can be met within the general changing areas by provision of:

- open bench changing or double-sized cubicles
- showers fitted with fold-down seats.

A separate guidance note deals with this subject in detail.

### Toilet accommodation

Male:	One WC, one washbasin, one urinal per 15—20 users
Female:	One WC per 7—10 users, one washbasin per 15 users.

### Smaller four-court halls

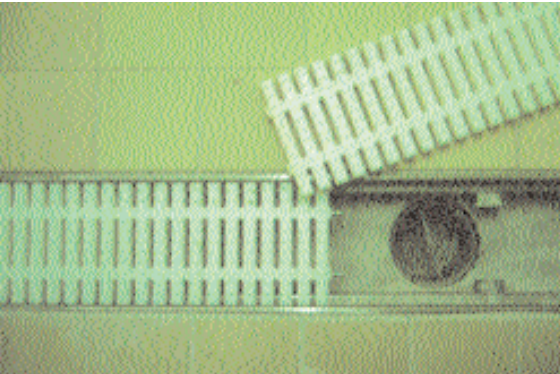
Toilets can be planned to share a common access lobby with changing rooms. This is an economical, proven arrangement that concentrates services and affords convenient access to sports, social and office areas.

### Larger centres

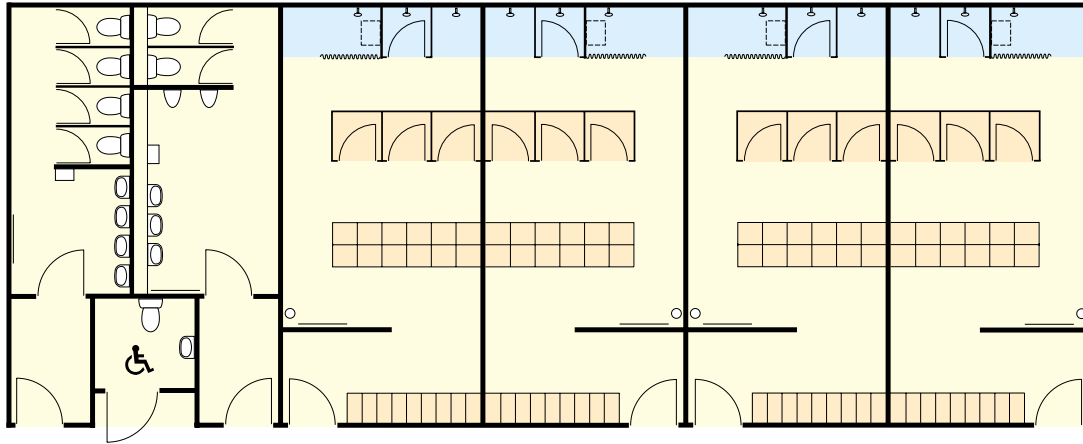
These require more dispersed accommodation which can include separate toilets for staff, licensed areas and outdoor changing units.



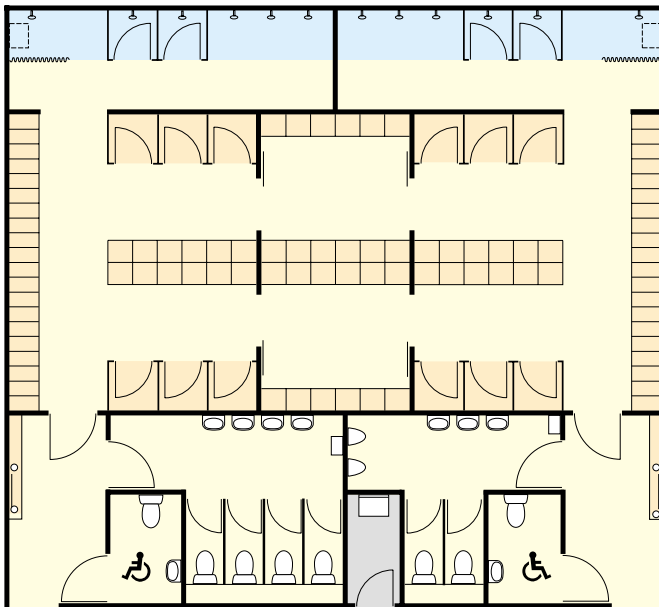
Basin ducts protect pipework and simplify surface cleaning. In this example ‘between basin’ dispensers help conceal any soap spillage.



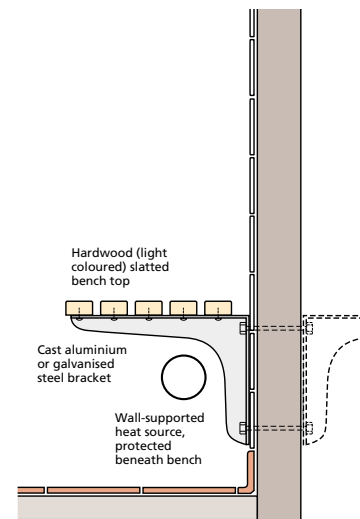
Floor channels with bucket gullies and lift-off grilles make for efficient drainage of showers and other wet areas.



Individual units allocated as required to provide flexibility. Each unit can incorporate toilets if the centre's main facilities are not adjacent.



An arrangement of similar capacity incorporating lockable buffer rooms for flexibility. Generally, this is the more economical approach in terms of overall floor area and is more easily supervised.



Cantilevered benching and wall-hung heating source allow floor surfaces to be easily cleaned.

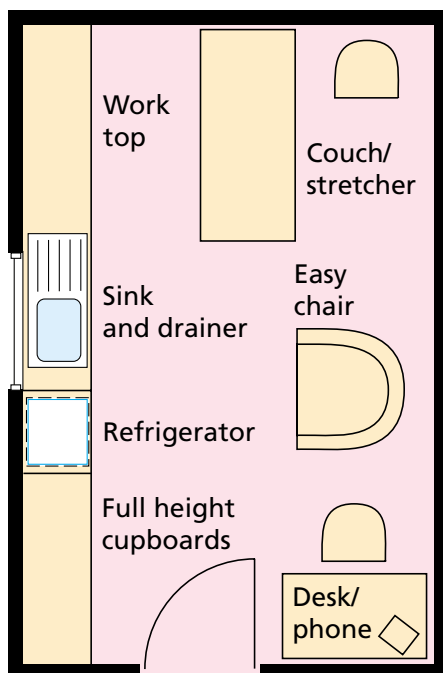
### Cleaner's store

Even in a small hall separate provision for the storage of cleaning equipment and materials must be made. Locate the store close to the changing accommodation and include a bucket sink.

### First aid

The most basic provision is shared use with an office or staff restroom containing a sink and drainer, a secure first aid cabinet and access for a stretcher. A clear space of 2 x 1.6m is recommended as a minimum.

In order to achieve compliance with the Code of Practice, a necessity for all but the smallest sports halls, provide a dedicated space and consider increased dimensions for an extended role as a physio treatment room.



**A first aid room plan for a medium-sized sports centre. Small centres can incorporate first aid within a staff area but sufficient clear space must be provided.**

### Mechanical and electrical services

Heating, lighting and ventilation services can account for a significant proportion of construction costs. Installations should be designed for simplicity and serviceability to achieve the required environmental conditions and energy saving measures, good insulation and sealing and automatic light switching should be deployed. These topics are fully covered in separate guidance notes.

### External sports facilities

Where site dimensions permit it is advantageous to include a floodlit and fenced multi-use games area close to the hall. These tennis court, or larger, sized facilities can significantly increase overall use and can reduce wear and tear in the sports hall. Overall changing capacity will have to be increased according to the capacity of the play area and some secure external equipment storage must be provided. All-weather areas will require paved routes connecting with the hall's main or secondary entrance, arranged so that staff can supervise the changing-to-play area route.

The same criteria will apply to tennis or netball courts but grass pitches and cricket squares require separate changing rooms with field exits. Site planning should be arranged so that routes to grass and all-weather areas do not cross or coincide. In centres with extensive outdoor provision a pavilion, suitably orientated for external viewing and located for servicing, could be provided.





**An inviting, recessed entrance provides a welcoming introduction to a sports centre.**

Sport England aims to lead the development of sport in England by influencing and serving the public, private and voluntary sectors. Our aim is:

**more people involved in sport**

**more places to play sport**

**more medals through higher standards of performance in sport**

#### **Sport England Disclaimer**

Every effort has been made to ensure the accuracy of the information contained in this publication. Sport England, its servants or agents shall not at any time, in any circumstances, be held responsible or liable to any party in respect of any loss, damage or costs of any nature arising directly or indirectly from reliance placed on the material in this publication, or any other guidelines or policies issued by Sport England. This information has been prepared as a basic guide only and should not be viewed as a substitute for obtaining comprehensive expert or professional advice.

This guidance and Sport England policies on Lottery funding applications are subject to change from time to time, including variations required to comply with governmental directions on the application of Lottery funds. Sport England reserves the right to amend, supplement and/or discontinue, at its absolute discretion for whatever reason, any or all of the guidelines set out in this publication.

There are a number of Guidance Notes on related matters. A current list of these can be obtained from:

Sport England Publications  
PO Box 255, Wetherby LS23 7LZ  
Tel: 0990 210255. Fax: 0990 210266



Sport England is the brand name of the English Sports Council which is the distributor of the Sport England Lottery Fund.

' Sport England, February 1999  
SE/864/5M/2/99  
16 Upper Woburn Place, London WC1H 0QP  
Tel: (0171) 273 1581. Fax: (0171) 273 1710  
[www.english.sports.gov.uk](http://www.english.sports.gov.uk)  
From April 2000:  
Tel: (0207) 273 1581. Fax: (0207) 273 1710

Design concept by Vernon Oakley Design, London  
Produced by Wylie Design, London  
Printed in England by Keldia Printing Company Ltd



Ref: 864  
£10  
ISBN 1 86078 094 6

## Sports Halls: Sizes and Layouts



## Introduction

This Guidance Note recommends minimum dimensions for the design of multi-sports halls. As well as being the UK's most popular indoor sport badminton has the most demanding requirements for a number of functional elements including lighting and associated roof structure, background colours and air velocities. For these reasons the overall dimensions of the five halls shown are derived from the optimum arrangement of badminton courts compatible with the minimum spatial requirements of other indoor sports.

The space required for most games depends on the standard of play; generally the higher the standard the larger the space. The playing area is usually the same size but increased safety margins and clear height may be required. For most competition play an extra zone is required for team benches and an officials' table and a further security zone between teams and spectators may be required for major events. Adding these margins around the playing area produces the critical overall space – the minimum safe area for each standard of play.

In specialist halls individual requirements, particularly for sports that need a larger pitch such as handball, hockey and korfbal, may overrule the modular method in favour of the key sport's critical dimensions. Other factors which may militate against the modular method include:

- dedicated extra space – for example a sprint chute for indoor athletics
- additional spectator seating
- where a large hall serves as a regional sports arena
- to adjust to structural and key building component sizes
- non-sports events that require increased space
- where a multi-sports hall is designed for county or national standard play in one or more sports.

## Which sports – how many courts?

Guidance on selecting a hall size to accommodate a range of sports at different levels of play is shown in the table. It covers the sports that require line markings and confirms the number of courts and pitches for each size of hall. The table omits sports that need less space for which all the sizes noted have ample capacity and sufficient clear height. The abbreviations used denote:

R	recreational
P	practice
C	club
LD	lower divisions, local league
TD	top divisions, local league
Cy	county
Rg	regional
N	national/international

A few three-court halls have been built, but with an area only 20% less than four-court halls and because of the restrictions imposed on most team games they are not considered to represent value for money. However, three-court (27 x 18 x 7.6m), two-court (17 x 18 x 6.1–7.6m), and one-court (10 x 18 x 6.1m) sports halls are covered in the Guidance Note *Village and Community Halls*.



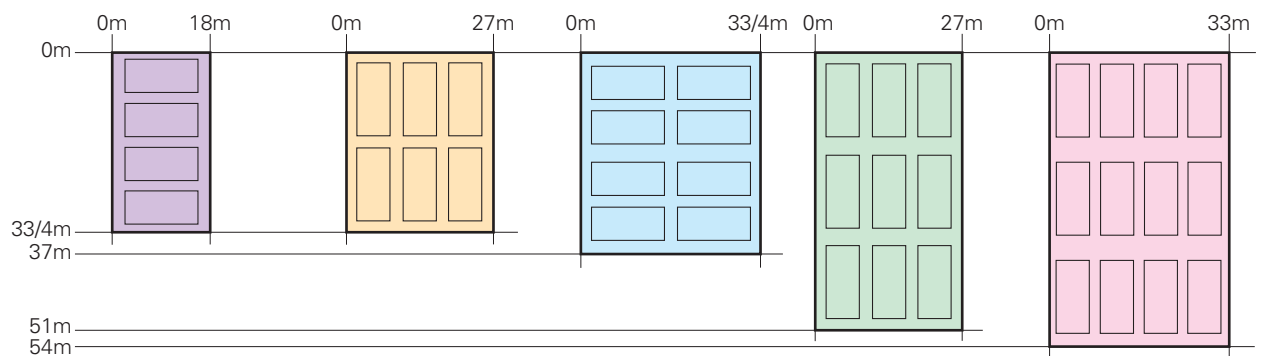
**Sports hall structure, lights and division netting must be aligned between badminton courts.**

	Four-court hall 33 x 18 x 7.6m 594m <sup>2</sup>			Six-court hall 33/4 x 27 x 7.6m 918m <sup>2</sup>			Eight-court hall 37 x 33/4 x 7.6/9.1m 1221m <sup>2</sup>			Nine-court hall 51 x 27 x 7.6/9.1m 1377m <sup>2</sup>			Twelve-court hall 54 x 33 x 9.1m high 1782m <sup>2</sup>		
Sport	Standard of play			Standard of play			Standard of play			Standard of play			Standard of play		
	C R	Cy	N	C R	Cy	N	C R	Cy	N	C R	Cy	N	C R	Cy	N
Badminton and short tennis	4	–	–	6	3 9.1m ht	3	8	3/6* 9.1m ht	3/6*	9	6	6	12	6/9*	6
Basketball	C(LD) 1	–	–	C(TD) 1 2P	C(TD) 1 2P	1	C(LD) 2 –	C(TD) 1 2P	1	C(LD) 1/2P	C(TD) 1/3P	1	C(LD) 3	C(TD) 1/2*	1/2*
Gymnastics	P	–	–	P	–	–	1	P	–	2P	1	1	3P	1	1
Five-a-side football	1	P	–	2	1	–	2	1	–	3	1	P	3	3	1
Handball	1 Mini	–	–	1	–	–	2	1 9m ht	–	2	1 9m ht	1 9m ht	3	1	1
Indoor hockey	1 Unihoc	–	–	1	–	–	2	P	–	2	1	1	3	1	1
Korfball	P	–	–	P	–	–	1	–	– 2P	1	1 9m ht	1 9m ht	3P	1	1
Netball	P	–	–	P	–	–	2P	1	–	1/2P	1	1	2P	1/2*	1/2*
Volleyball	1	1	–	2	1/2P	–	2	2 10.5m ht	1/2	4	2/3* 10.5m ht	1/3	4	2/4*	2/3 10.5m ht
Sports hall athletics	P	P	–	P	1	–	2P	1	1	1	1	1	2P	1	1

## Notes

\* Maximum number of courts, without spectator seating, for preliminary rounds

P Below space standard for competition play recommended by the governing body, but suitable for practice and training



Modular incremental sports hall dimensions.

### Four-court hall

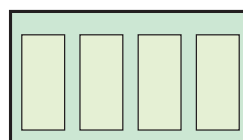
The critical minimum dimensions for this most popular size of sports hall are 33 x 18 x 7.6m. Main structure must always be aligned between the badminton courts to create four bays. Extra width can be considered to enable cricket nets to be hung alongside rather than over the badminton courts and to provide an extended spectator zone. An extra 1.5m added to the length and 0.25m to the width allows for a full-size netball court with side and end margins.

### Notes

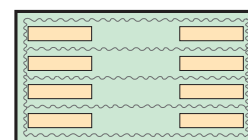
- A minimum height of 7.6m must be provided over the whole badminton court area and 7m minimum for most team games including basketball and volleyball.
- The 33 x 18m dimensions allow four doubles play badminton courts with a central division net.
- County standard badminton requires a length of 34.8m and a height of 9.1m.
- The 18m width is ideal for several of the smaller space sports. A full-length fencing piste, short mat bowls carpet and up to four table tennis tables can be accommodated across the width of the hall.
- Badminton courts can be central in the hall or offset to provide a narrow circulation zone to the entrance side of the hall.
- Bagged cricket and hall division netting can be stowed outside the critical play areas for most sports but for five-a-side football which utilises the whole space nets must be hoisted above shoulder height.
- Basketball benefits from an increase in width to 19m to allow full side margins or, alternatively, the minimum margins plus officials' space.

The diagram on page 5 shows the full markings typically used in a four-court hall with key setting out dimensions. Recommended line colour is shown on a background that denotes a

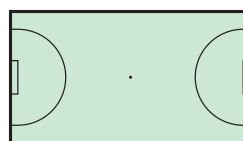
beechwood floor. Preferred positions for door openings and viewing panels are included around the perimeter. The netball play area is shown reduced to allow full safety margins. Smaller scale diagrams for individual sports are shown later in the Guidance Note. They provide background on the possibilities and restrictions inherent in planning multi-purpose spaces but do not show all line markings. **Consult governing body handbooks for this level of detail.**



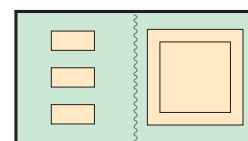
Badminton



Cricket nets



Team games



Trampoline/judo

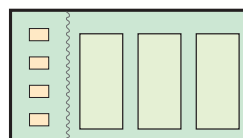
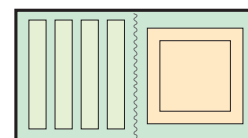
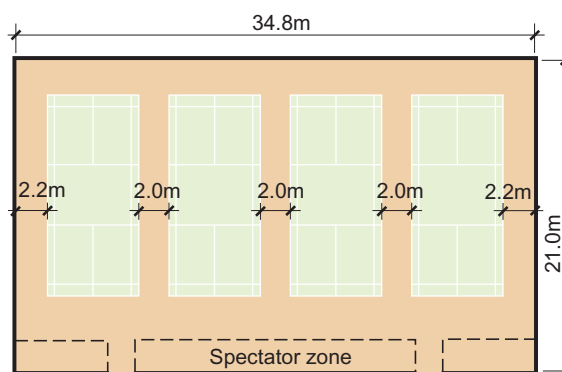


Table tennis/badminton

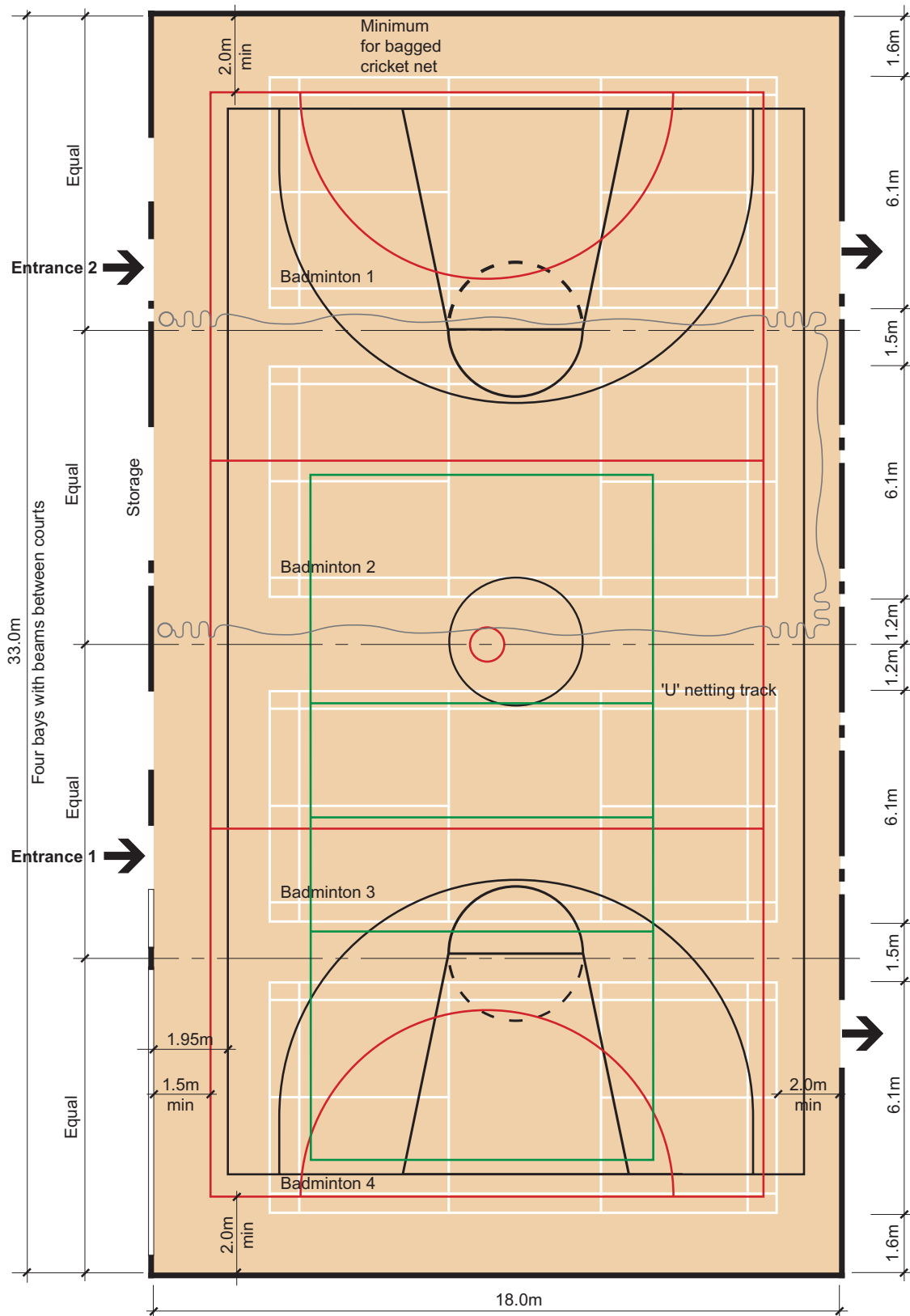


Short bowls/gymnastics

### Different uses of a four-court hall.



**An example of enhanced dimensions for county level badminton – also ideal for netball.**



A 33 x 18 x 7.6m four-court hall.

### Six-court hall

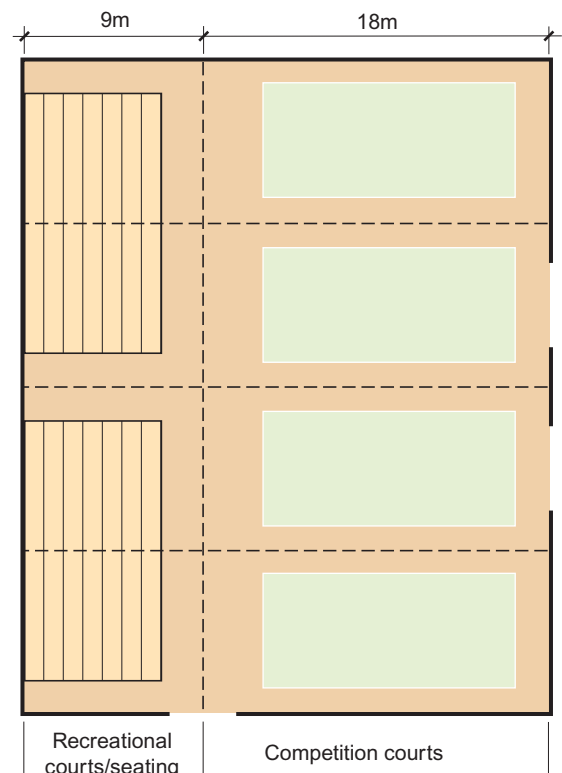
The 33/34 x 27 x 7.6/8.4m hall creates two team sports zones or a competition play area aligned with spectator seating. The 3 + 3 badminton court arrangement is recommended in preference to the 4 + 2 layout originally used in this type of hall. The 34m length provides the required safety margin behind the badminton courts. Further increases in length will be required for county standard play.

#### Notes

- Align structure between badminton courts to provide three full-span bays or introduce a primary beam across the centre of the hall.
- Division netting is hung between the three rows of courts. It can also be considered between two end courts but this zone is usually designated for retractable seating.
- A height of 9.1m and extra length is required for county standard badminton.
- Two standard basketball courts or two reduced five-a-side football courts can be laid across the hall with modified 'D' end markings.
- Wider pitches for recreational handball, hockey and korfball are possible in the six-court hall as well as more space for sports hall athletics.
- The 4 + 2 badminton court arrangement requires a four-bay structure to ensure that lighting and transverse netting accord with the four primary courts.
- In the 4 + 2 layout shown there is insufficient length to accommodate the full run-back to end-on courts in the 9m zone.

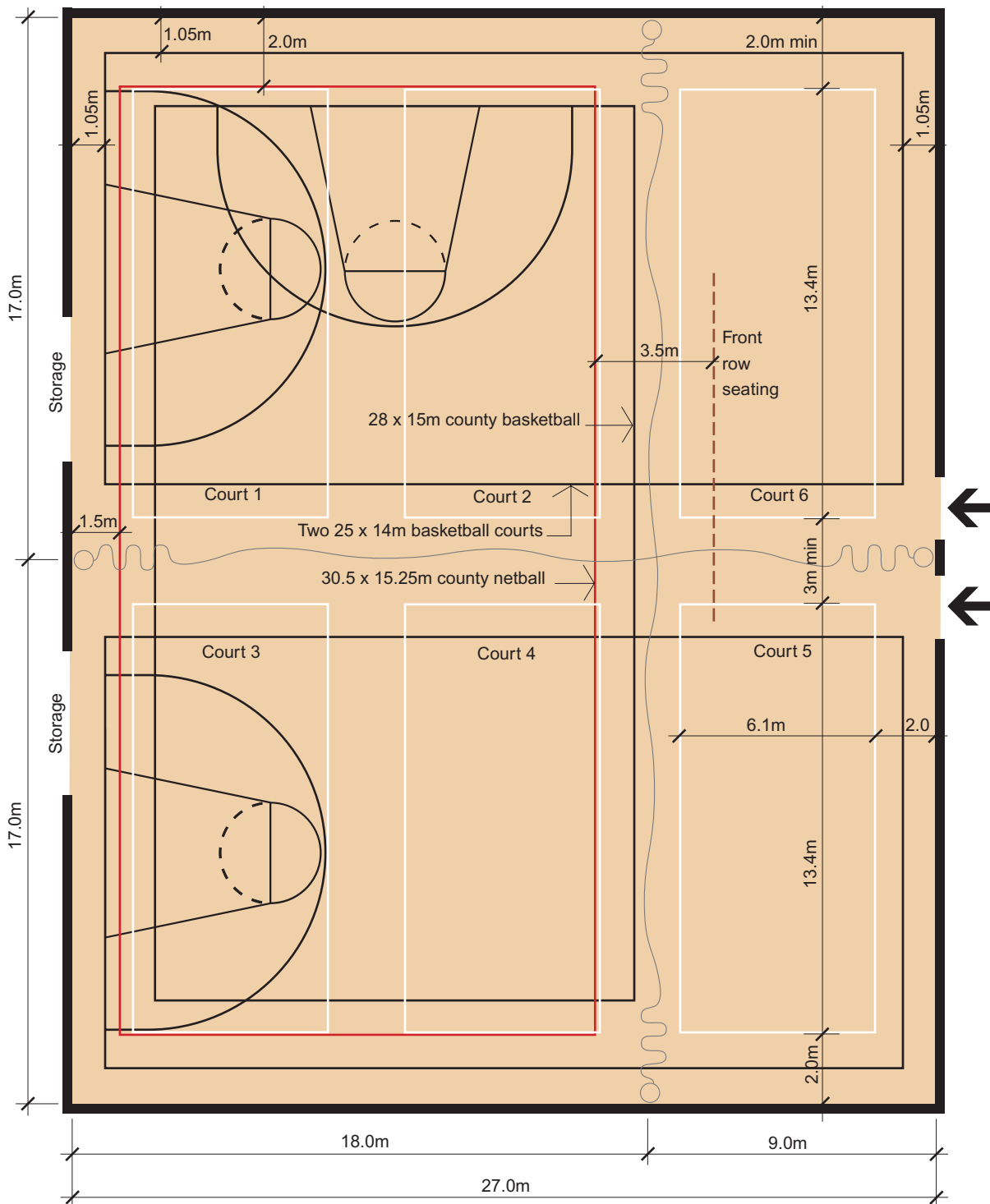


**Large halls can be divided into two or more team game or competition zones.**



**The traditional 33 x 27m layout gives a longer competition court for team games but structure must run between the four primary badminton courts.**





A 33/34 x 27 x 7.6/8.4m six-court hall. The minimum area for six badminton courts and ball games.

#### Sports hall activities in order of popularity

Activity	Hall visits (%)
Badminton	24.4
Keep fit/aerobics/step/yoga	23.6
Indoor five-a-side football	18.3
Martial arts	6.3
Carpet/mat/short bowls	6.1
Gymnastics	3.6
Basketball	2.3
Netball	2.1
Table tennis	1.9
Dance	1.8
Trampolining	1.8
Indoor hockey	1.6
Tennis/short tennis	1.5
Roller skating/roller blading	1.2
Indoor cricket	1.0
Multi-sports session	0.7
Racquetball	0.6
Volleyball	0.6
Boxing	0.4
Archery	0.2
Fencing	0.2
Indoor golf	0.1
Roller hockey	0.1
Other in hall	1.1

Base: All sports hall visits.

Note: Percentages add up to more than 100% as a user could take part in more than one activity during a visit.

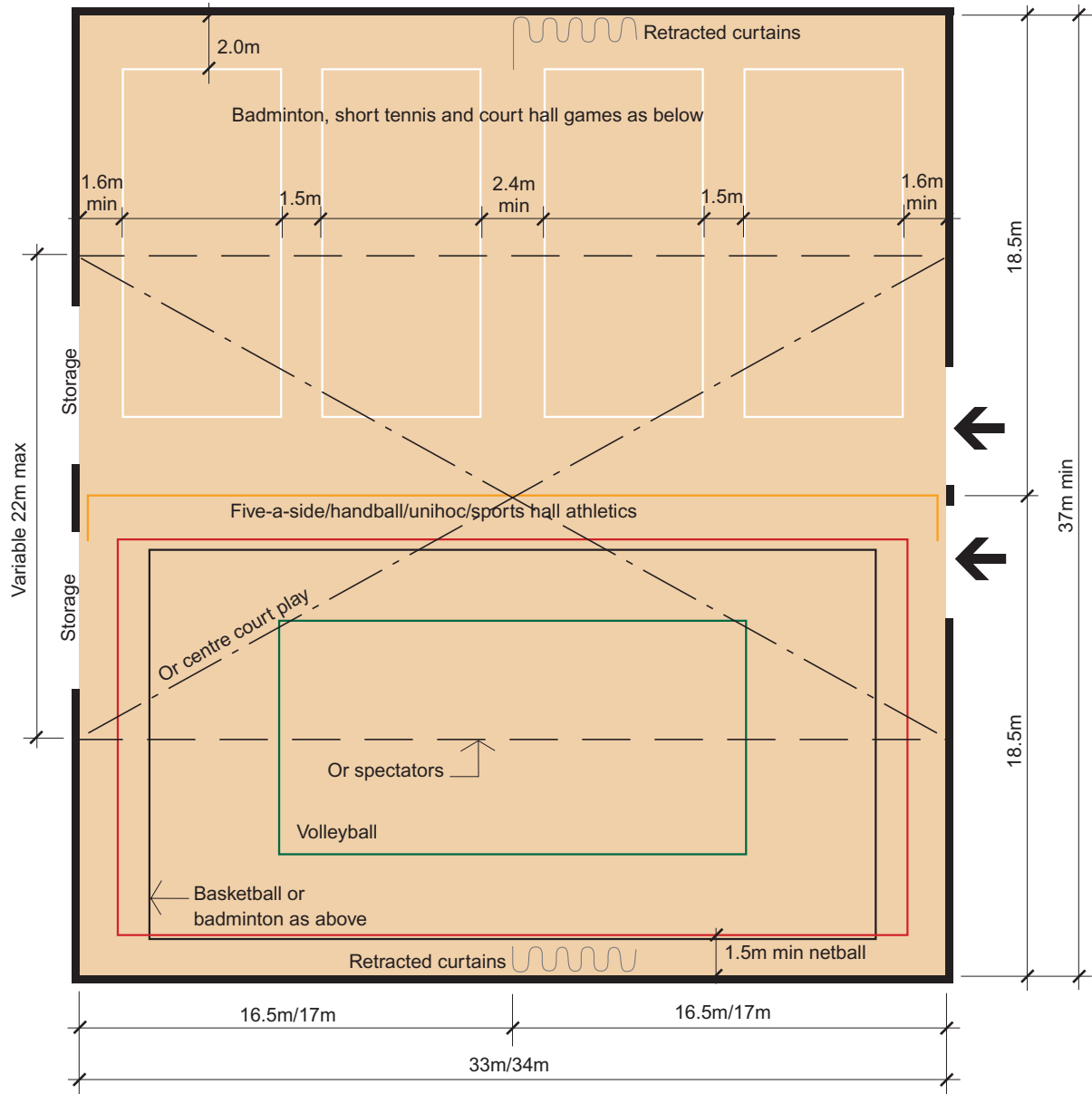
Source: *Survey of Sports Halls and Swimming Pools in England*, Sport England (1999).

#### Eight-court hall

The critical dimensions are 37 x 33/4 x 7.6 or 9.1m. This hall can be divided into two full-size play zones for most sports hall team games. Height requirements become more demanding as hall size increases and the environmental impact of extra high halls has to be weighed against more restricted use and possible ball damage in too low a hall.

#### Notes

- This size is particularly suitable for county netball and top division basketball. For netball the court would be marked out to take advantage of the 37m dimension or, preferably, width would be increased.
- Align structure between badminton courts to provide four full bays or introduce a central primary beam.
- Four county standard badminton courts can be marked out or rolled down and require a clear height of 9.1m.
- To accommodate a minimum size indoor hockey pitch, handball or korfbal, length must be increased to 39m.
- These halls can seat upwards of 1,000 spectators for a table tennis final or for other sports with limited space requirements. Escape routes from the hall must take this capacity into account.
- Invariably, eight-court halls are used for non-sports events and access for users and equipment requires extra consideration. An increase in overall area is sometimes justified.



A 37 x 33/34 x 7.6/9.1m eight-court hall. The minimum area for two full zones for ball games. County standard badminton courts would align along the hall length.

### Spectator seating

Spectator requirements should be established at the outset as seating capacity is a major determinant in selecting hall dimensions. Additional space can often be justified to increase income or to add flexibility for both sports and non-sports events. Spectator provision can take several forms:

- Chairs or benches lined along the side of the hall and outside the critical overall sports space.
- Casual viewing via glazed screens or a spectator paddock at hall level.
- Retractable units with benching or fold-down chairs mounted in recesses or kept in a separate store. The fold-back units will have a depth of at least 1m which must be added to the hall's dimensions. Seating stores should have external access for delivery and extra high doors may be required.
- Other types of demountable seating stored on site or hired when required.

The critical factors in specifying seating are to provide unobstructed viewing and to maintain spectator safety. Specific provision must be included for viewing from wheelchairs.



**Bleacher seating:** mobile pull-out units can be arranged around different competition court layouts.

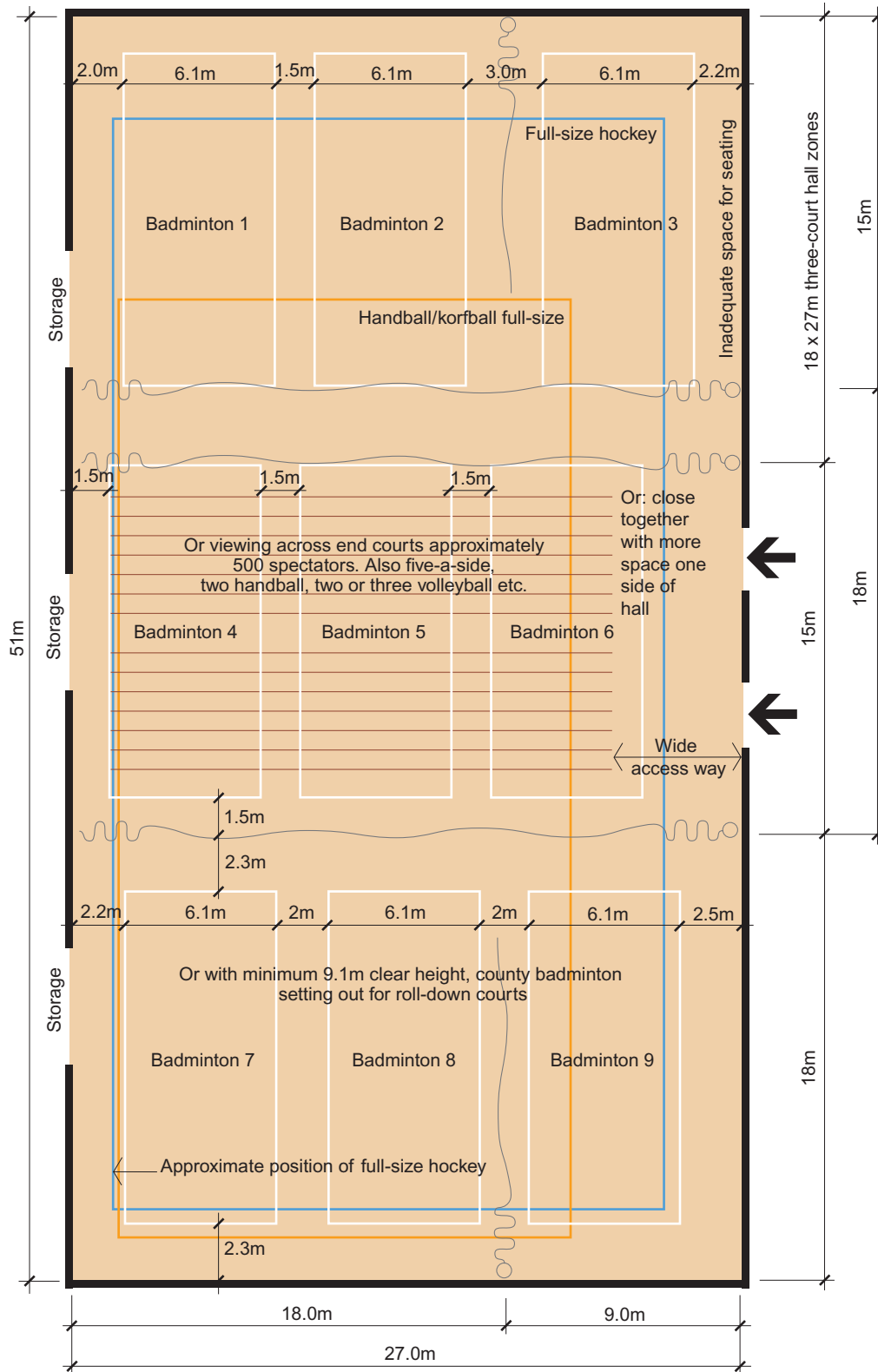
### Nine-court hall

This 51 x 27 x 9.1m high hall is suitable for club standard indoor hockey, handball, korfbal and five- or six-a-side football. Its elongated dimensions also provide more scope for sports hall athletics and gymnastics. Spectator capacity within the hall is limited for long pitch games when extra width may be considered worthwhile.

A smaller hall 47m in length would be suitable for a full-size indoor hockey pitch with 1.5m end run-outs but does not provide such a space-efficient layout for badminton.

#### Notes

- Hall area is 11% greater than the eight-court hall but there is greater sports capacity and, essentially, space for the three long pitch games.
- Run main structure to divide the hall into three zones with secondary structure between badminton courts.
- It can provide three to six activity zones with good access from a circulation route down the length of one side of the hall.
- There is space for six county standard roll-down badminton courts with seating for approximately 500 spectators in the central zone.
- The 27m width does restrict flexibility in laying out the smaller team games and results in more courts being run lengthwise down the hall.
- Narrower dimensions than for the eight-court hall can result in a more economical structural design.



A 51 x 27 x 7.6/9.1m nine-court hall for a full-size indoor hockey pitch and other big pitch sports.

### Upgrading sports halls

Some sports halls built during the past 30 years do not conform to current recommended dimensions. Increasing the length is sometimes possible but it is unlikely that the width or clear height can be economically increased. It is never worth spending large sums of money on upgrading halls of substandard size or surrounding them with new accommodation. If they are too small they need to be replaced.

The following notes are offered as a guide to determining the viability of older halls:

- Check clear dimensions. Take site measurements rather than relying on old drawings then compare with current recommended standards.
- If the hall is undersize determine whether a revised court layout will permit current safety and officials' zones to be achieved.
- If clear height is significantly compromised consider a replacement hall as the first option. Anything below 7m over the playing area is now regarded as unsuitable for all but recreational levels of play for sports with specified height requirements.
- Check that safety margins can be met each side of division netting.

If hall dimensions appear suitable check that the following features already exist or can be incorporated:

- area elastic floor to conform to BS 4077: Part 4
- flush wall surfaces from floor to ceiling without recesses or projections and with 50% light reflectance
- outward opening doors flush with the surrounding wall surface
- compact fluorescent light fittings mounted between badminton courts.

### Twelve-court hall

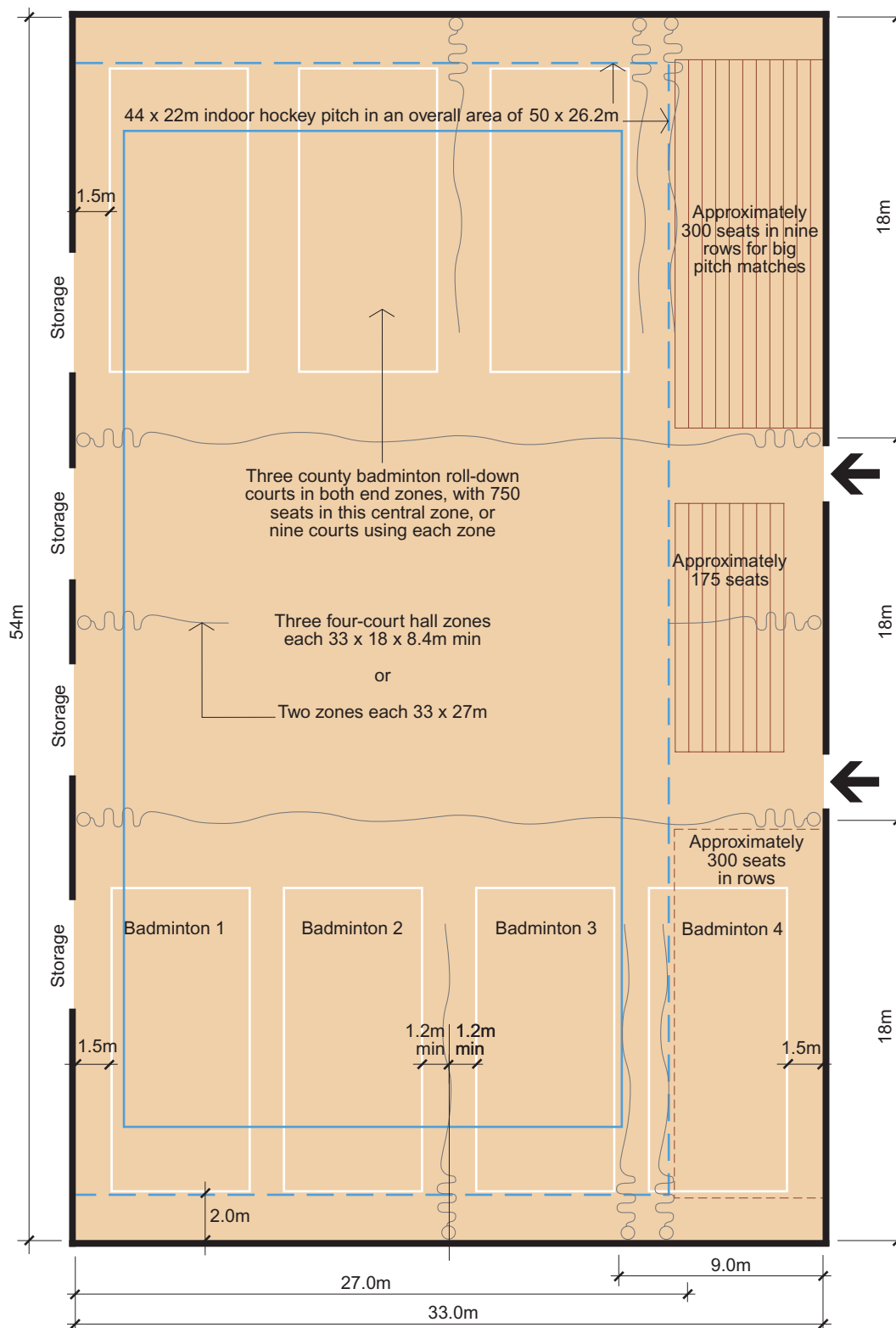
At 54 x 33 x 9.1m this size has the capacity of a small regional arena, a spectator venue for local and county level competition. It is a larger version of the nine-court layout.

#### Notes

- Three modules of the four-court hall can be arranged by dividing the length into 18m (and variable) width zones or two six-court hall zones.
- Primary structure should run between these zones with secondary structure between badminton courts.
- Extra flexibility is provided by lengthwise subdivision.
- Over 700 seats can be aligned along one side of the hall for handball, hockey or korfball spectators and more for other sports or entertainment events.
- An increase in width permits banks of seating to each side and possibly also to each end of the competition pitch.

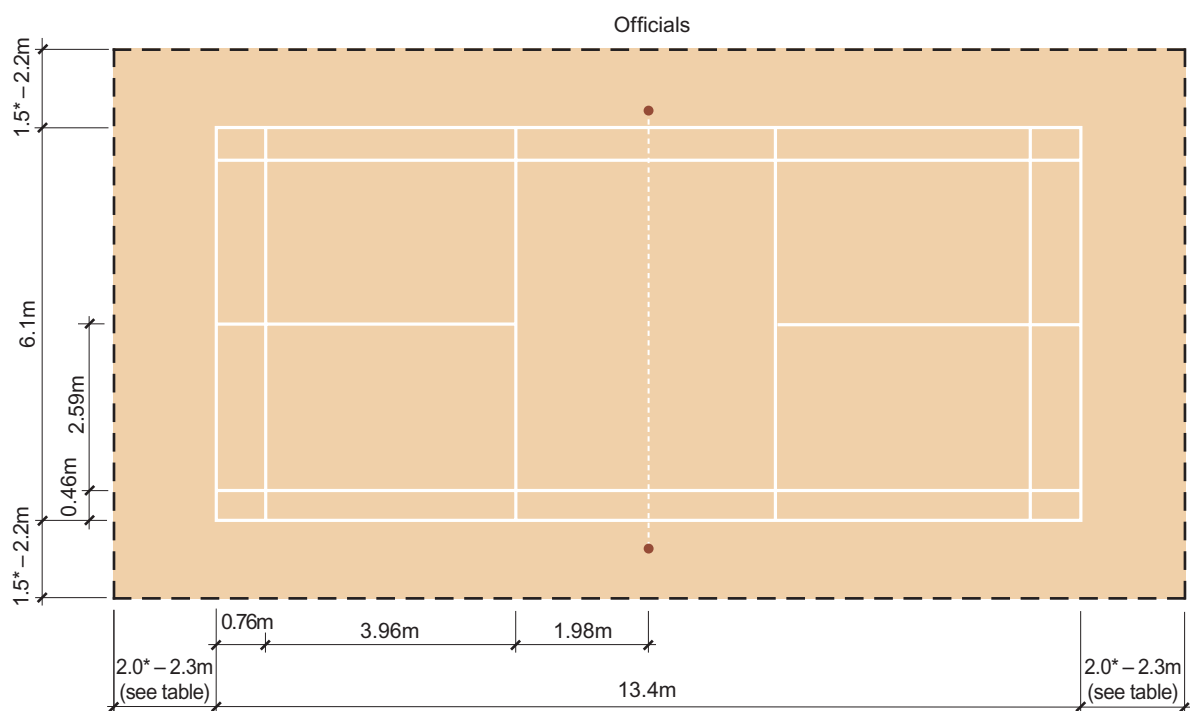


**A first generation sports hall with lighting and structure that would be difficult to upgrade to meet current standards.**



A 54 x 33 x 9.1m twelve-court hall, or the basis for a regional arena. Capacity includes three ball game zones each of four-court hall size, or divided into two zones of 33 x 27m with plenty of spectator seating for hockey and centre-court ball games using the whole hall.

### Dimensions for individual sports

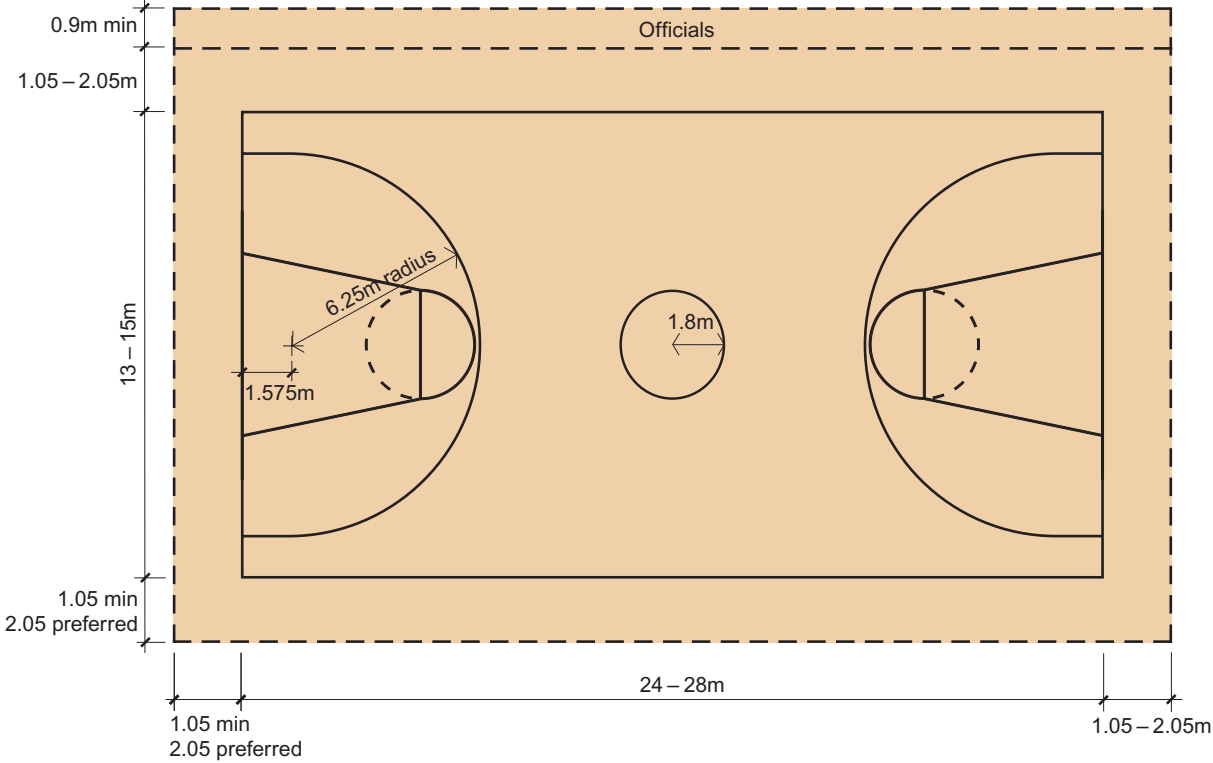


Dimensions of a badminton court.

	Recreational/ Club	County/ Regional	National/ International
Minimum height over court	7.6	9.1	9.1
<b>Playing area (doubles court)</b>			
Length	13.4	13.4	13.4
Width	6.1	6.1	6.1
Wall from baseline, min	2.0*	2.3	2.3
Wall from sideline	1.5 min	2.2	2.2
Between parallel courts, min	1.5*	2.0	2.0
<b>Minimum overall area</b>			
For a single court	17.4 x 9.1	18 x 10.5	18 x 10.5
For a parallel pair	17.4 x 16.7	18 x 18.6	18 x 18.6
For each additional court	+7.6	+8.1	+8.1
*Baseline to division netting 1.5 min; sideline to division netting 1.2 min			

Badminton space requirements (m).

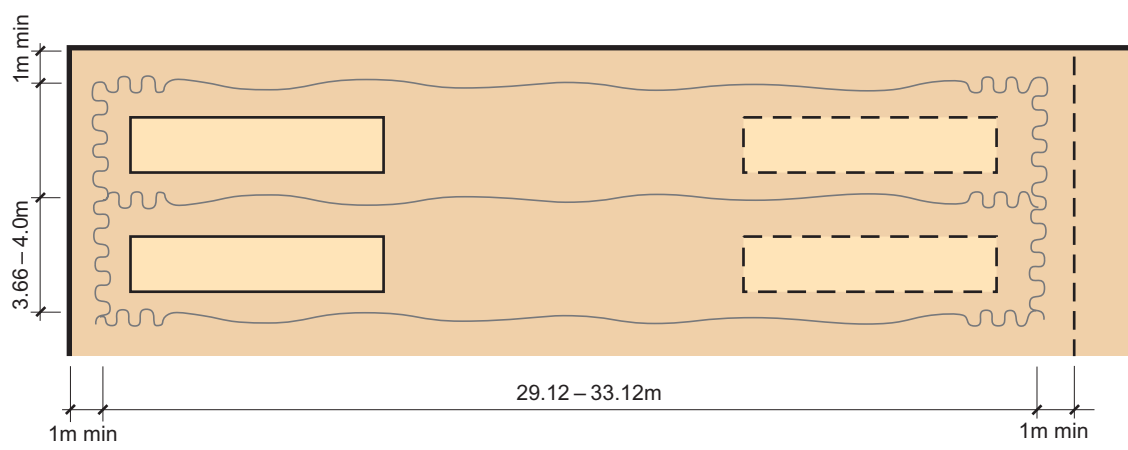




Dimensions of a basketball court.

	Recreational/ Club	County/ Regional	National/ International
Playing area			
Length	24–28	24–28	28
Width	13–15	13–15	15
Out-of-bounds surround	1.05 min	2.05	2.05 min
Extra one side for officials and team areas	0.9 min	3.0	3.0
Minimum overall space			
Area	R: 20.1 x 12.1 C: 30.1 x 18 to 26.1 x 16	32.1 x 22.1 to 28.1 x 20.1	32 x 22.1
Height	R: 6.7 C: 7.0	7.0	7.0

Basketball space requirements (m).

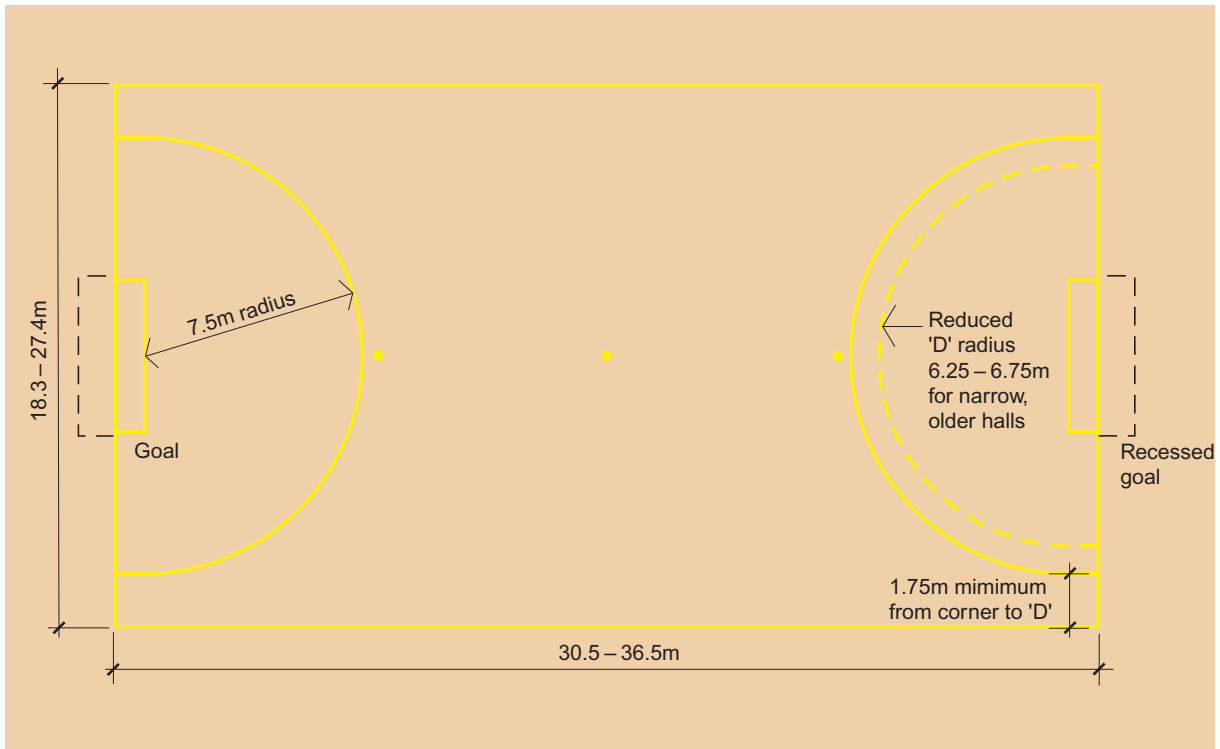


Dimensions for cricket practice.

	Minimum	Recommended maximum
Length	29.12	33.12
Width	3.66	4.0
Height of horizontal top net	4.0	4.5
Safety margin surrounds	1.0	

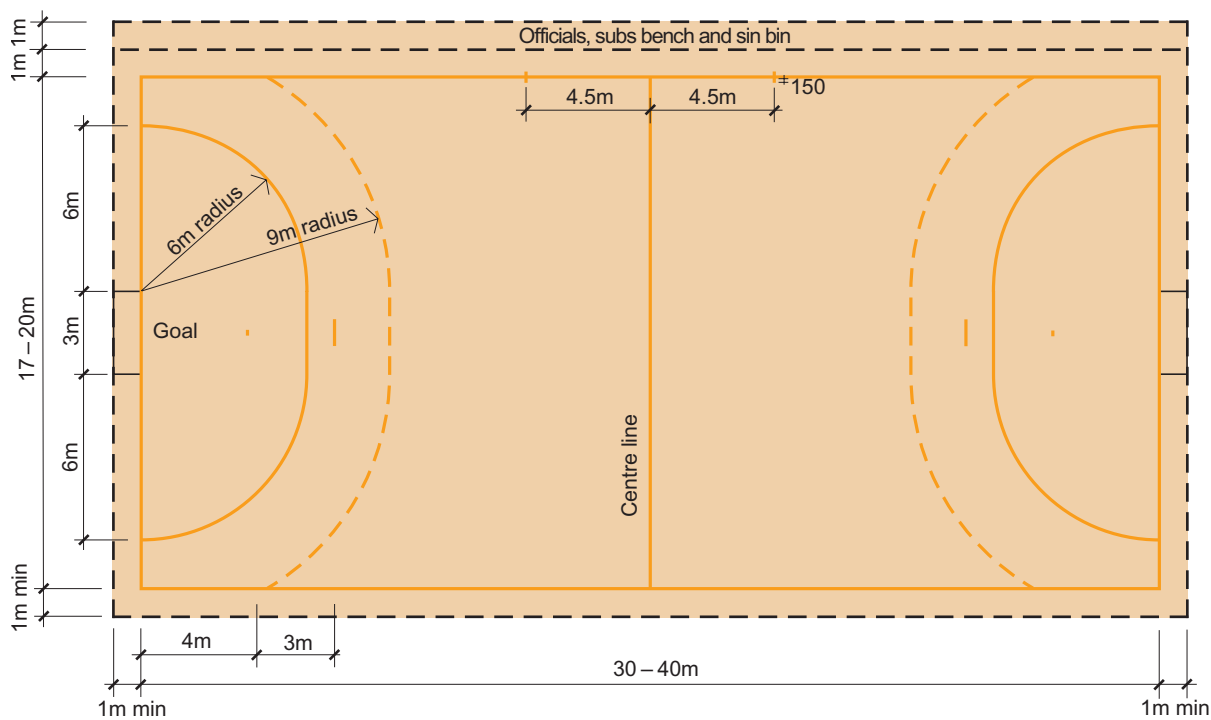
Cricket practice space requirements (m).





Dimensions of a five-a-side football pitch.

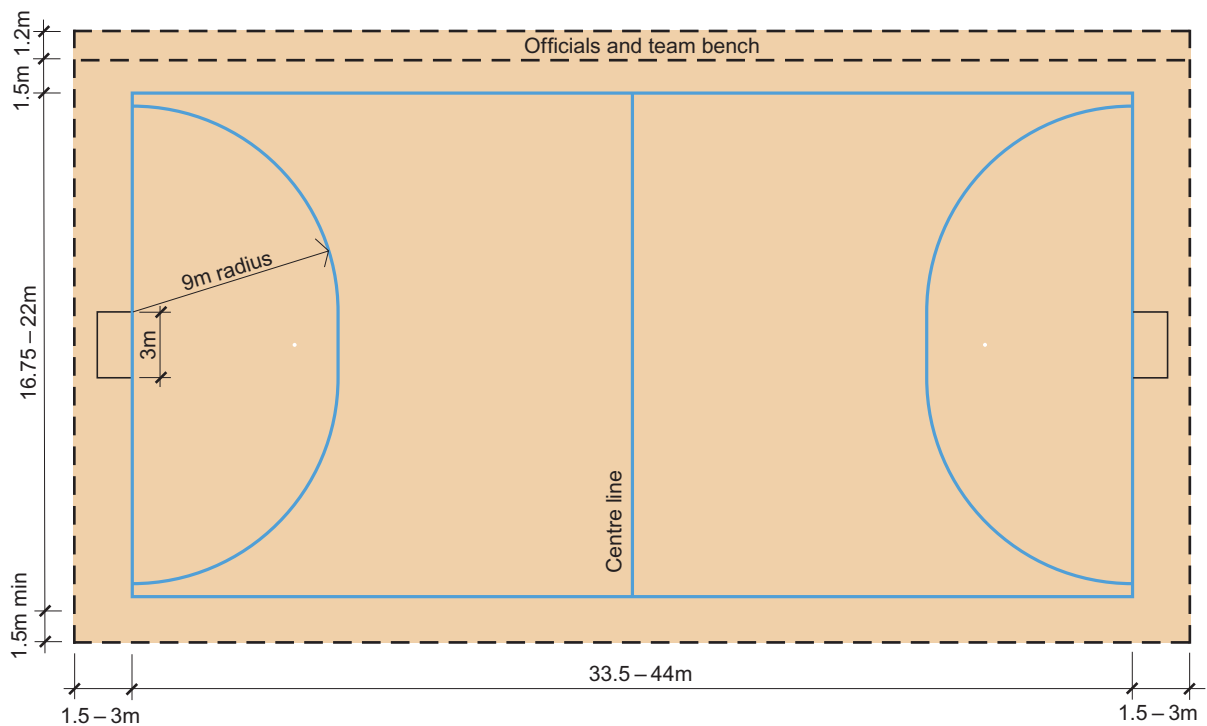




### Dimensions of a handball court.

	Recreational	Club/ County/ Regional	National/ International
<b>Playing area</b>			
Length	30	34.5–40	40 min
Width	17 min	18–20	20
Side margins, min	None	1.0	1.0
Officials/team bench space, additional one side	–	1.0	1.0
End margins, min	–	1.0	1.0
<b>Minimum overall space</b>			
Area	32 x 17	36.5–42 x 21–23	42 x 23
Height	6.7–7.6	7.6–9.0	9.0

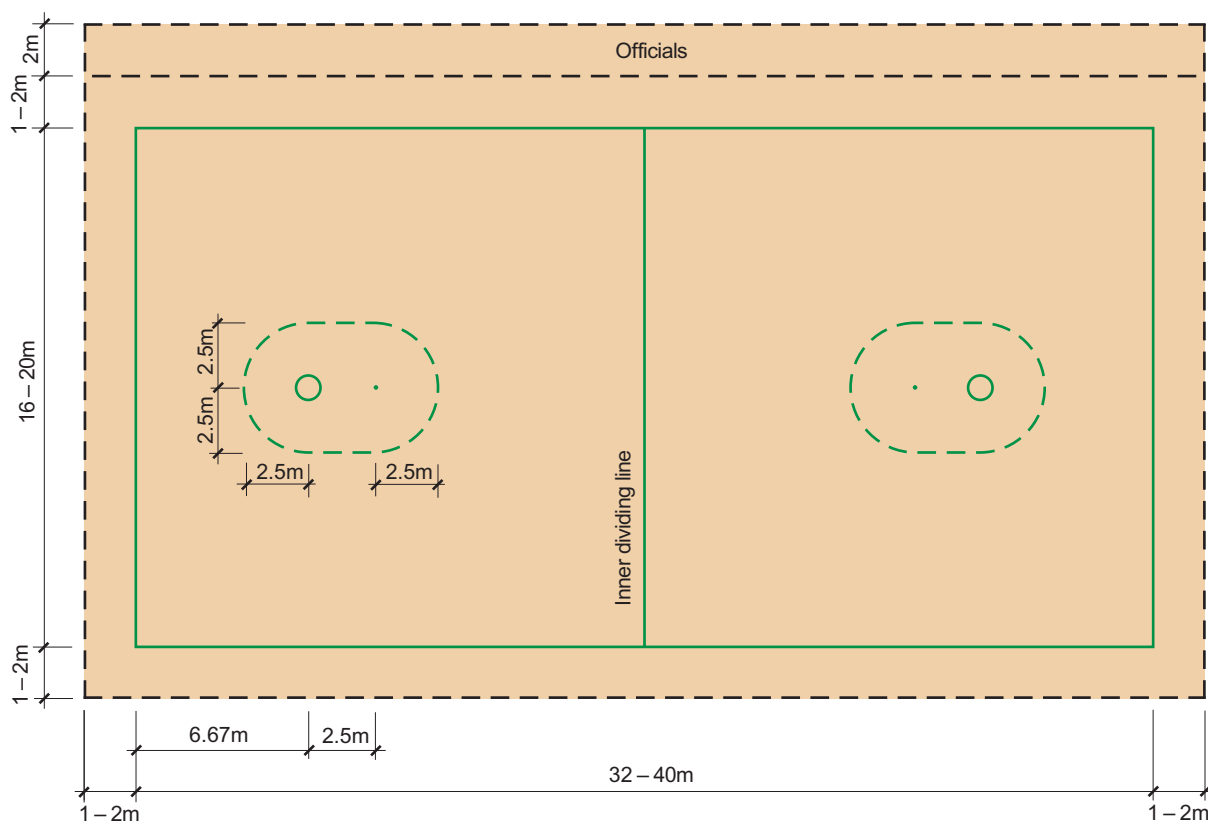
**Handball space requirements (m).**



Dimensions of a hockey pitch.

	Recreational	Club/ County/ Regional	National/ International
Playing area			
Length (including back lines)	2:1 length/width	36–44 or 33.5	36–44
Width (including 100 x 100mm side boards)	18–22	18–22 or 16.75	–
Run out behind back lines	1.5	1.5–3.0	3.0
Clearance outside side boards	–	1.5 min	1.5 min
Officials' table and team benches (additional clearance on one side)	–	1.2	1.2
Overall area	2:1	39–50 x 22.2–26.2 or 36.5 x 21	42–50 x 22.2–26.2
Height	No prescribed minimum height		

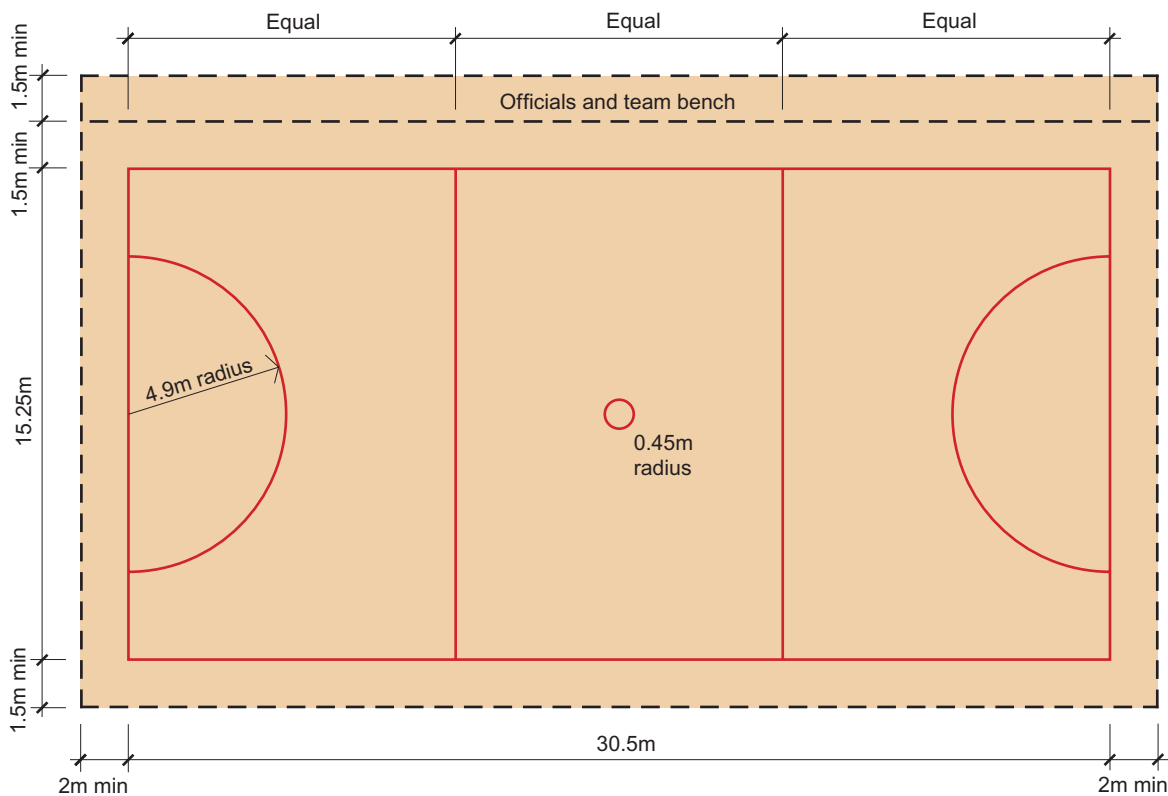
Hockey space requirements (m).



**Dimensions of a korfball pitch.**

	Recreational	Club/ Intercounty	National/ International
<b>Playing area</b>			
Length	32–36 min	36–40	40
Width	16–18 min	18–20 min	20
Side margins	1–2.0	2.0	2.0
Extra margin for table and bench	–	2.0	2.0
End margins	1–2.0	2.0	2.0
<b>Minimum overall space</b>			
Area	34 x 22 to 49 x 22	40 x 22 to 44 x 26	44 x 26
Minimum height	7.0	9.0	9.0

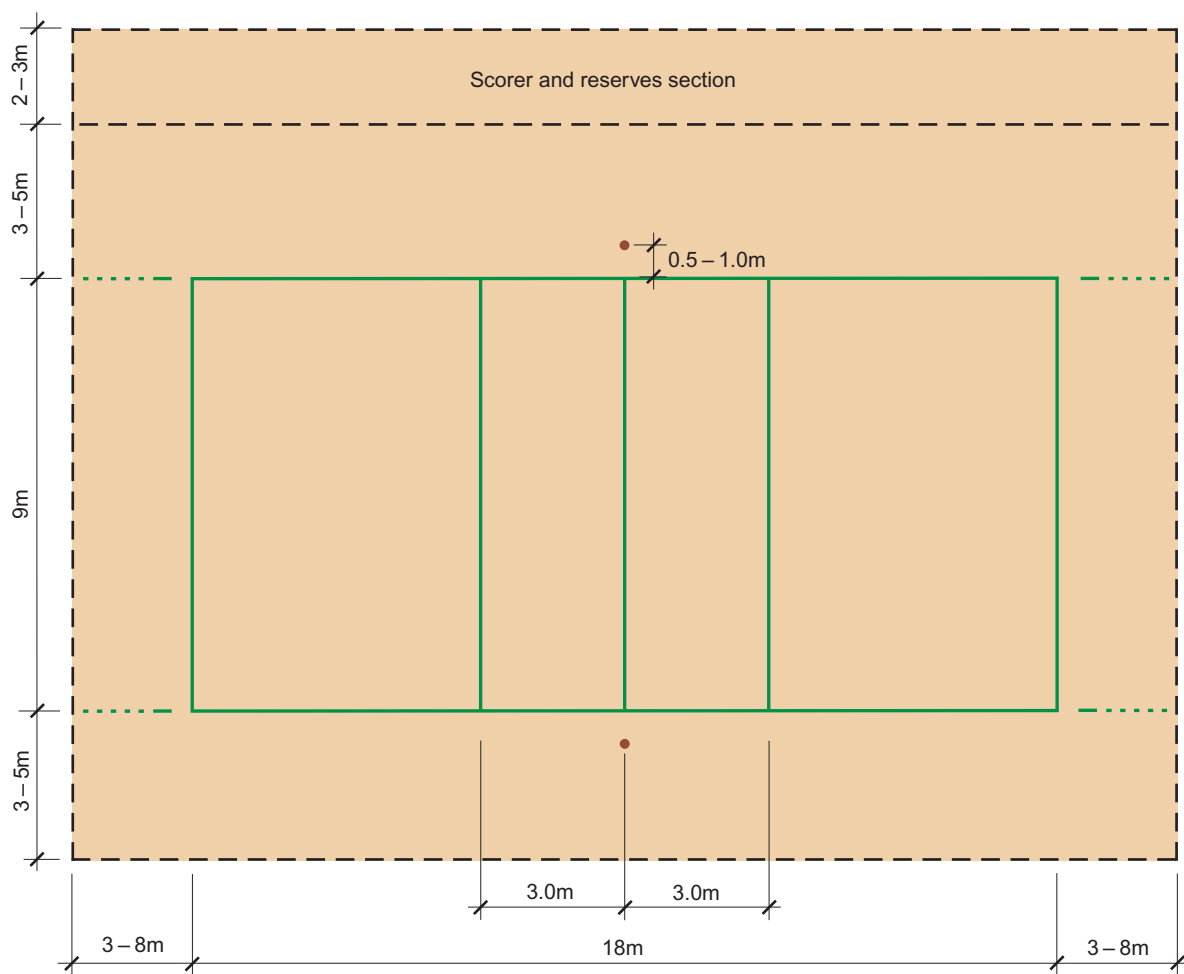
**Korfball space requirements (m).**



Dimensions of a netball court.

	Recreational	Club	County	Regional/ National
<b>Playing area</b>				
Length	30.5	30.5	30.5	30.5
Width	15.25	15.25	15.25	15.25
Margin along sidelines	1.5*	1.5*	1.5*	1.5–2.0*
Extra margin for match tables and team benches	–	–	1.5 min	1.5
Margin space behind goal lines, min	2.0 <sup>+</sup>	2.0 <sup>+</sup>	2.0 <sup>+</sup>	2.0 <sup>+</sup>
<b>Overall area</b>	34.5 x 18.25	34.5 x 18.25	34.5 x 19.75 min	34.5 x 19.75–20.75
Minimum height	6.7–7.0	7.0–7.6	7.6	7.6
* 2m between parallel undivided courts + 3m between end-on courts Note: In standard and undersize sports halls, court size must be reduced to maintain minimum run-off margins.				

Netball space requirements (m).



### Dimensions of a volleyball court.

	Recreational	Club/ County/ Regional	National	International
<b>Playing area</b>				
Length	18.0	18.0	18.0	18.0
Width	9.0	9.0	9.0	9.0
Backline clear space	3.0	3.0	5.0	8.0
Sideline clear space	3.0	3.0 min	3.0 min	5.0
Officials' space (additional on one side)	—	2.0	2.0	3.0
Spectators' margin (additional on the other three sides)	—	—	2.0	3.0
<b>Minimum overall space</b>				
Area	24 x 15	24 x 17	28 x 19	40 x 25
Clear height	7.0	8.0	10.5	12.5

### Volleyball space requirements (m).





Court markings show up well on this beech floor and the badminton court zones are clearly defined.

Sport England aims to lead the development of sport in England by influencing and serving the public, private and voluntary sectors. Our aim is:

**more people involved in sport**

**more places to play sport**

**more medals through higher standards of performance in sport**

#### Sport England Disclaimer

Every effort has been made to ensure the accuracy of the information contained in this publication. Sport England, its servants or agents shall not at any time, in any circumstances, be held responsible or liable to any party in respect of any loss, damage or costs of any nature arising directly or indirectly from reliance placed on the material in this publication, or any other guidelines or policies issued by Sport England. This information has been prepared as a basic guide only and should not be viewed as a substitute for obtaining comprehensive expert or professional advice.

This guidance and Sport England policies on Lottery funding applications are subject to change from time to time, including variations required to comply with governmental directions on the application of Lottery funds. Sport England reserves the right to amend, supplement and/or discontinue, at its absolute discretion for whatever reason, any or all of the guidelines set out in this publication.

#### Copyright statement

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the permission of Sport England.

There are a number of Guidance Notes on related matters. A current list is available from:

Sport England Publications  
PO Box 255, Wetherby LS23 7LZ  
Tel: 0870 5210255. Fax: 0870 5210266  
Minicom: 0870 1207405. E-mail (order enquiries only): [sportebbooks@twoten.press.net](mailto:sportebbooks@twoten.press.net)



Sport England is the brand name of the English Sports Council which is the distributor of Lottery funds to sport.

© Sport England, February 2000

SE/980/5M/2/00

16 Upper Woburn Place, London WC1H 0QP

Tel: 020 7273 1581. Fax: 020 7273 1710

[www.english.sports.gov.uk](http://www.english.sports.gov.uk)

Design concept by GDA Creative Solutions

Produced by NBA Tectonics

Photography by Alastair Carew-Cox, Alan Edwards, Charlie Fawell and Richard Sowersby

Printed in England by Belmont Press



Ref: 980  
£10  
ISBN 1 86078 108 X

## Village and Community Halls



## Introduction

Village and community halls are the smallest buildings that can accommodate a sports programme alongside the customary social and arts pursuits. There are a wide variety of types and sizes, all with the following in common – a main activity and assembly space together with ancillary accommodation that might include additional small halls. Whatever the content, design must ensure that a full range of activities can be carried out without detriment to each other.

It is vital to allow sufficient time to get the building brief right and to select an appropriate and accessible site at the heart of the community. The resultant building should be aesthetically pleasing and reflect the care taken to produce a quality facility capable of meeting the evolving needs of the community and the services it needs. A new stand-alone building is often the preferred solution but there are other options that may be more economical:

- Extension and upgrade of an existing community hall to improve environmental standards and permit more activities.
- Addition of a hall, store and revised circulation to a refurbished sports pavilion.
- Inclusion of a community hall in a sports and leisure centre.
- Planning for community use of new schools (primary or secondary) by upgrading some of the accommodation.



**Interior of a typical village hall with dimensions suitable for sport and with a stage for drama.**

## Site planning

### Location

A central location with sufficient car parking is best, close to shops and other well-used facilities and to public transport. A site that is equally accessible to established and new areas of development can instill a sense of ownership across the community.

If the preferred site is in a conservation area the proposed building form and external finishes may be subject to planning requirements that could have a significant impact on development costs. The same potential restrictions apply to any outdoor play area or pitch where floodlighting might be a contentious issue.

Proposals to locate community buildings close to residential areas or elderly people's housing can encounter opposition. The size of a potential site might allow the building and related parking to be set at a reasonable distance from boundaries, or there may have to be some plant screening.

Sport's requirements are often best served where there is sufficient space for an outdoor multi-use games area to supplement activities taking place in the hall. There is no point in replicating facilities provided nearby so a careful evaluation of need is important.

If the site provides for cricket, tennis or bowls the building could double as a pavilion and will have to be oriented so that changing exits and the 'club room' relate to the outdoor facilities. Where there are grass pitches, independent changing rooms will be required.

Proximity to existing services – electricity, gas (where available), water and mains drainage, and to an existing roadway – will all help to reduce cost. Any rights of way or other easements must be identified and their impact on the proposed development assessed. Level, well-drained sites are cheapest to develop.

Consider also if there is sufficient space to allow for car parking, development of outdoor facilities and subsequent extension of the building.



The hall should be close to the centre of the community and wherever possible have access to external play areas.

### Car parking

Requirements for on-site parking vary according to location but there are several common design factors:

- Mark out bays for maximum utilisation and locate parking for disabled people close to the main entrance.
- Define separate pedestrian routes and install ramped curbs between disabled parking bays and the entrance. Changes of level around the building must be ramped and may require handrails.
- Make sure that service vehicles can turn within the site to access the entrance, refuse area and plant room.
- Provide lighting for security and safety.
- Car park noise is often a nuisance to nearby residents especially in the evening. Siting the building to screen neighbours from the car park can alleviate this problem.
- Provide bicycle lock-up parking close to the entrance where it can be overseen.

### Landscaping

A planting scheme will help link the building to its surroundings and in urban projects can help create a more welcoming appearance to the entrance environment. Suitably selected shrub planting will provide a barrier to the building face, deter vandalism and give more privacy and security to glazed accommodation. All new planting will need initial barrier protection.

Parking and landscaping are covered in detail in a separate Guidance Note.

## The building

### Accommodation

Each location has individual requirements but 'core' accommodation for the smallest hall or community centre will include:

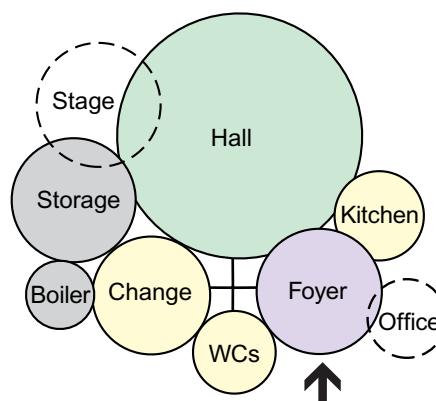
- main activity and assembly space
- entrance foyer
- equipment and furniture store
- kitchen
- toilets, including facilities for disabled people
- changing provision
- cleaner's store
- boiler or plant room.

This core accommodation can be expanded to include:

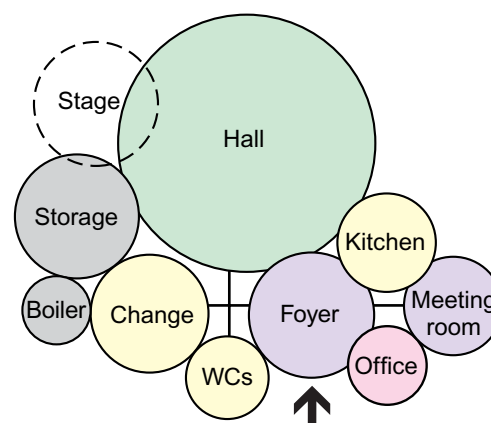
- an office
- changing or dressing rooms and showers
- more or larger activity spaces
- licensed bar
- permanent stage
- meeting or club rooms.

And, in certain situations:

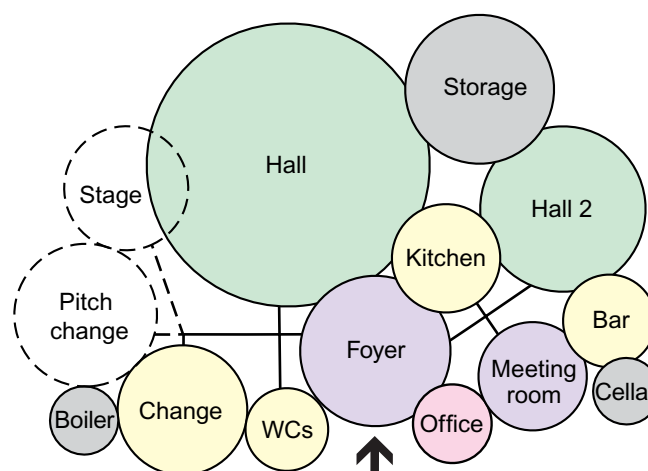
- grass pitch changing rooms
- fitness training room
- billiards and snooker room
- community health facilities
- daytime centre for the elderly
- information technology room
- village shop
- post office.



Smallest viable community centre or village hall.

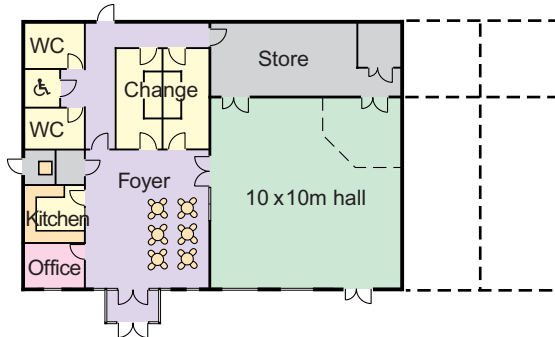


Next stage up with the addition of a meeting room.

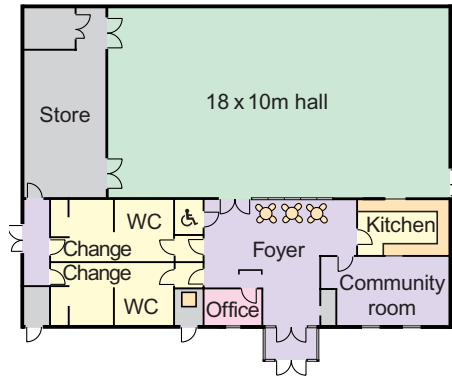


Larger village or community centre with a second hall and changing for outdoor sport.

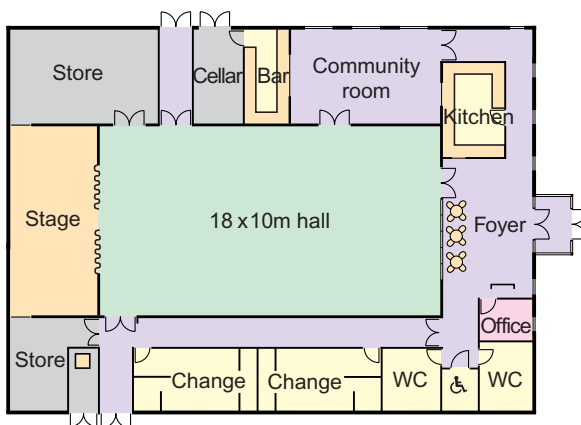
Spatial arrangement diagrams for different scales of accommodation.



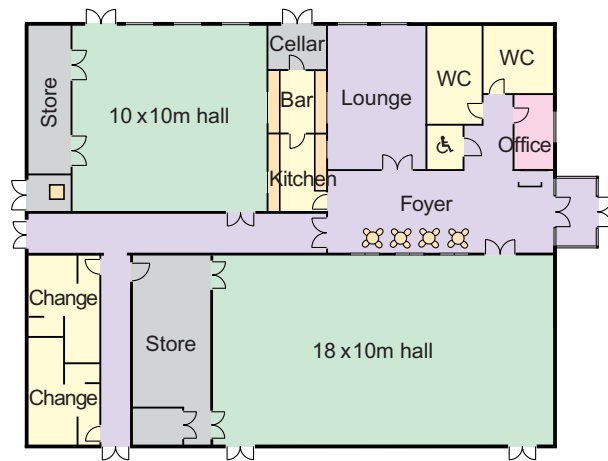
Smallest hall with the minimum support accommodation shown with potential extensions.



One-court badminton size hall with compact ancillaries including combined WCs and changing.

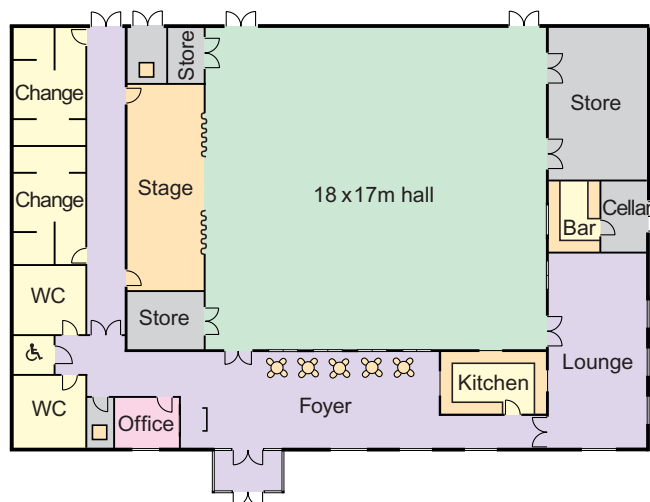


Symmetrical support accommodation around a hall with a separate stage.

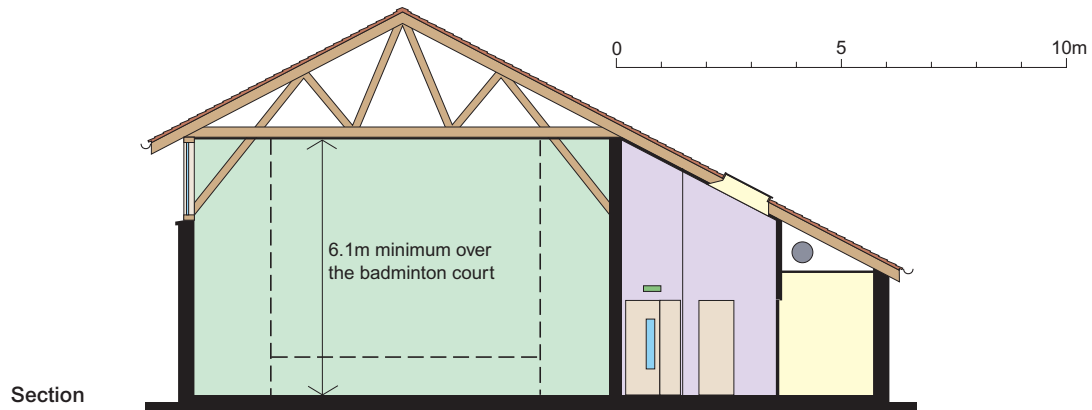


Centre with a second hall and a lounge/meeting room served by a bar as well as a kitchen.

Two-court badminton size hall with separate stage and a lounge/meeting room.



Five plans showing different sizes of hall planned in accordance with the principles set out in this publication.



Plan and section of an economically designed hall layout. The double set of corridor doors would allow the changing rooms to be used for stage productions.



## Planning

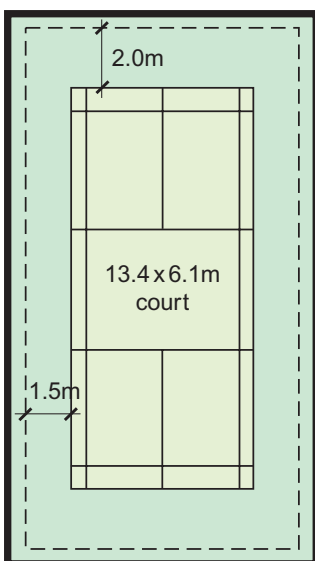
The proposed functions of the building must be carefully considered to achieve an efficient plan form that permits flexibility and concurrent occupation by different user groups – a drama rehearsal in the main hall and a simultaneous yoga class in a smaller, nearby room, for example.

Good acoustic separation is essential and is achieved through careful planning and specification of construction materials. Implementing separation is made more difficult by the need to arrange for the kitchen, and perhaps a bar, to serve two or more spaces. Lobbied or back-to-back double doors can help isolate noise.

Routes through the building should allow for reasonable segregation of user groups. On no account should the main hall or other public rooms be used for general access, and stores should always be directly accessible from the spaces they serve.

Summary of key internal planning issues:

- Plan the main activity spaces to conform to recognised sports dimensions.
- Include at least one meeting room. A main hall with supplementary rooms offers far more flexibility than a sub-divisible main space.
- Locate an office by the main entrance to overlook the building approach, foyer and main circulation.
- Locate toilets, including the disabled people's unit, close to the foyer.
- Allow storage space for pushchairs and coats close to the main entrance.
- Ensure wheelchair access throughout the building.
- Plan the kitchen with counters serving two or more public areas.
- Consider the benefits of linking adjoining assembly spaces with acoustically treated double doors.
- Locate equipment and furniture stores to be directly accessible to the spaces they serve.
- Site changing rooms so that they can serve the backstage area.
- If changing rooms are used for grass pitches at weekends ensure they are accessible for indoor use at other times and that supplementary changing is provided.
- Plan temporary bars to be adjacent to stores fitted with water and drainage services.
- Site and plan the building to allow later extension.



Badminton/short tennis

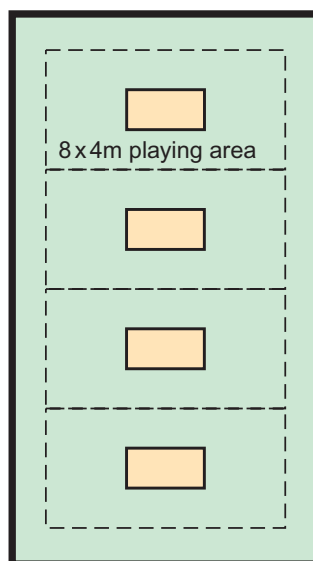
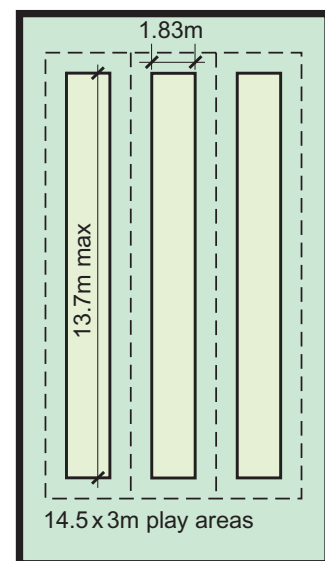


Table tennis – four tables



Short mat bowls – three carpets

The most popular sports in a one-court hall.

## Schools

New primary schools can provide opportunities to cater for community needs, especially in rural areas. Hall size will be increased over the normal educational standard and more storage will be required, but the school benefits from extra space and the community from a better quality building than might otherwise be achieved. A kitchenette, community room and extra adult toilets and changing will enable public facilities to operate independently from the rest of the accommodation.

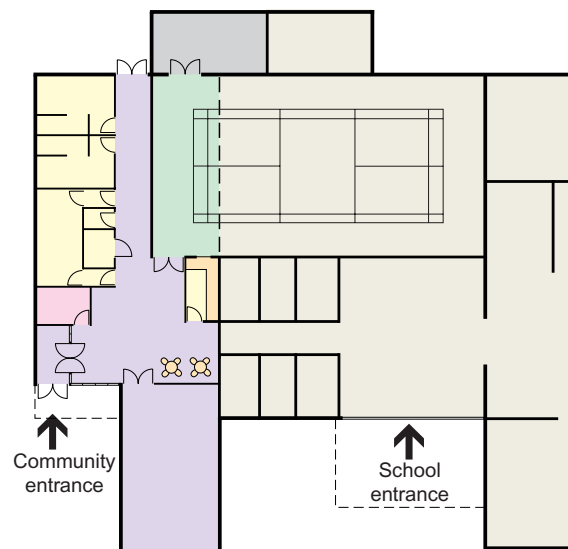
Converting a hall in an existing primary school is seldom practical as it is normally at the core of the accommodation. It may be possible to add a community room but the opportunities for indoor sport will be restricted. Issues to consider when examining opportunities for community use of new primary schools include:

- Community elements must be designed so that education use is not compromised.
- Hall size will need to be increased from the minimum 140m<sup>2</sup> to 180m<sup>2</sup> and 6.1m high.
- Plan to ensure that discrete school accommodation can be locked and secured outside school hours.



Hall in a rural primary school lengthened and heightened for community use.

- Increased parking may be necessary and should be lit for safe evening use.
- The community entrance must be well-signposted and lit, and must be welcoming.
- Provision for use by disabled people must be incorporated.
- Storage provision must be increased for adult-size equipment and furniture.
- A small kitchenette directly serving the hall will avoid encroaching on the school's catering arrangements.
- The need to provide adult toilets and changing to avoid shared use of children's accommodation.
- A community room 30–35m<sup>2</sup> that can be used by the school.
- Wall-hung equipment in the hall should be protected to ensure a safe, rectangular activity space.
- Separate metering of heating and lighting so that running costs can be properly apportioned.
- Outdoor surfaced play areas dimensioned for netball or tennis.



Adding extra length and height to the standard primary school hall provides opportunities for community use. Extra changing, storage, community rooms and, ideally, a separate entrance will be required.

### Building construction

Traditional domestic construction is often the most appropriate method for village and community halls. The clear span and height of the main hall are usually the only aspects that demand upgrading of normal domestic building techniques. Timber frame construction is worth considering as an alternative to load bearing masonry.

There is an extensive range of modular buildings on the market. Evaluation of these systems should cover durability, robustness and appearance as well as the maintenance requirements of their internal and external finishes. Some components may not be suitable for heavily used wet areas and acoustic separation of rooms may be inferior to purpose-designed buildings. Any structural constraints must be fully understood so that space standards are not compromised and costly modifications can be avoided.

The steel portal frame, a common economic form of construction for light industrial buildings, is sometimes considered for village and community halls but can produce a building of alien shape and scale unless suitably modified. Promised cost savings can disappear when structural components have to be encased and concealed.

Flat roofs should generally be avoided whatever construction method is used, and the number of external openings carefully controlled. The need to provide good quality of light and ventilation must be balanced against heat loss, summer heat gain and security. Carefully specified roof lighting can be used to illuminate and ventilate internal spaces.

### Main hall

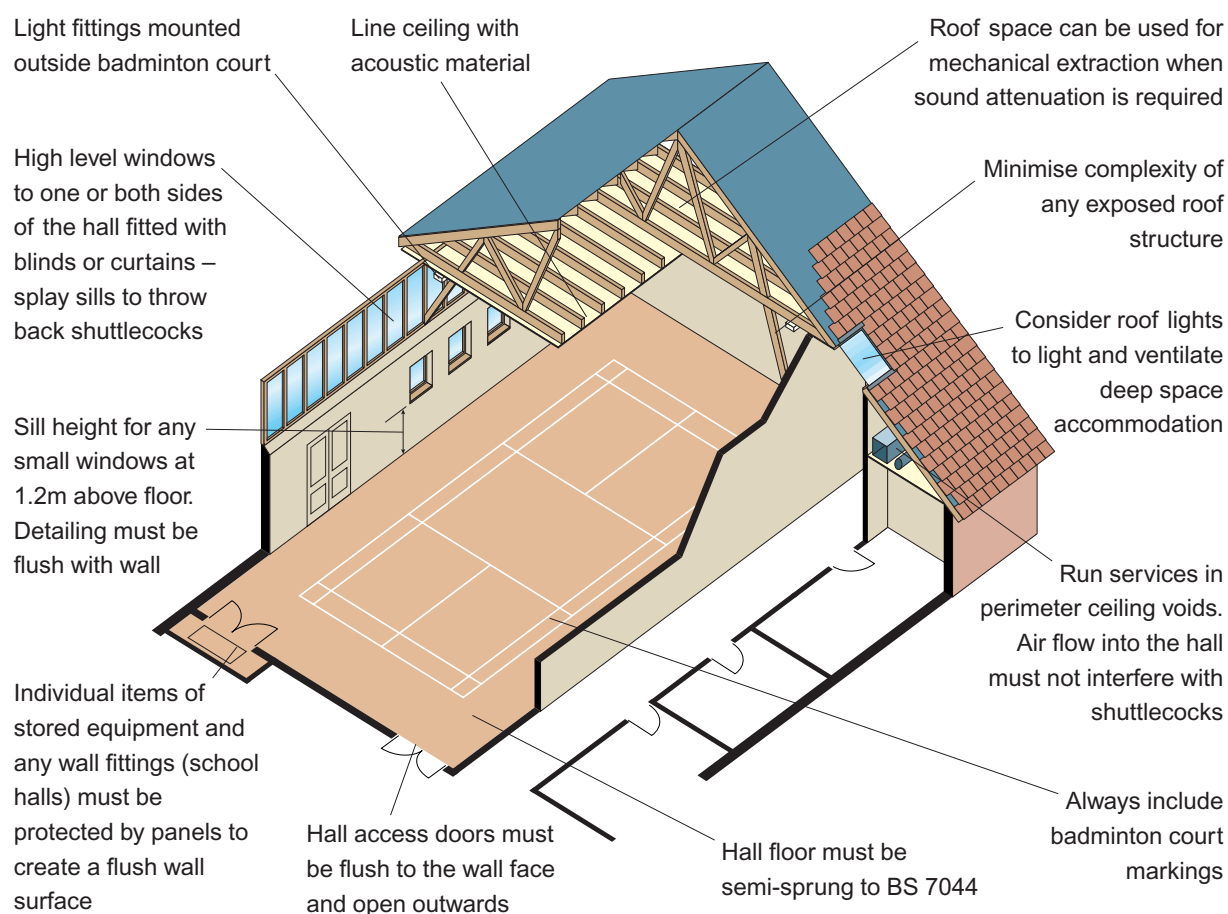
A one-court badminton hall 18 x 10 (17.6 x 9.1 min) x 6.1m minimum clear height accommodates the following range of activities as well as soft ball practice for a number of additional sports.

Sport/play	Other activities
Badminton	Clubs/societies
Short mat bowls	Concerts
Gymnastics	Conferences/meetings
Aerobics/keep fit	Dance/dance classes
Martial arts	Drama/films
Judo	Receptions
Yoga	Private functions
Playgroups	Auctions
Table tennis	Cheese and wine
Five-a-side (softball)	Women's Institute
Short tennis	Guides/scouts
Fencing	Discos

A two-court hall 18 x 17 (17.6 x 16.7 min) x 6.1–7.6m clear height will increase potential sports use and allow recreational mini-basketball, unihoc and five-a-side soccer. Additionally, audience capacity will be doubled from around 180 to over 300. This is usually the maximum size required, although three-court halls (27 x 18 x 7.6m) have been built. They are, however, small sports halls and invariably lack the flexibility for social and arts activities.

The recommended dimensions, based on the requirements of badminton, correspond closely to the size of many traditional halls. There is often a requirement for a stage, most usually in the traditional proscenium arch form. As a permanent feature a stage is an inflexible single-use area. The more economic alternative is modular platforms that create a stage of the required size in the required position, with or without surround curtaining.

The interior must be designed to be a suitable environment for all potential uses, with lighting that can be adapted to suit different activities and a safe and durable floor finish. It is recommended that hall finishes are specified to withstand games practice with soft balls only, as impact-resistant finishes and fittings severely



A cutaway view of a typical hall with key design and specification notes.

compromise the appearance of the hall for non-sports use. Hard ball games and practice should take place outdoors on a multi-use games area or in a purpose-designed sports hall.

### Floor

- An 'impact energy-absorbing' floor as defined in British Standard 7044: Part 4 is essential for sports use and provides a safer surface for children's play. The term refers to floors that deflect over a given area rather than simply beneath the point of applied pressure.
- Semi-sprung beech, beech and maple veneer and various composition and synthetic surfaces can meet the criteria set out in the British Standard. This subject is covered in detail in a separate Guidance Note.

- The surface must be durable and warm with some slip for sport and fitness exercises, but must not be hazardous when wet from food or drinks spillage.
- Badminton court lines are normally the only permanently applied markings – these are also appropriate for short tennis.

### Walls

- Must be flush-faced, smooth and impact-resistant. Fair-faced or plastered and painted brick or blockwork or robust timber or particle board linings are suitable materials. Any structural framing should protrude on the outside of the hall, never internally.
- A sound-absorbent finish can be used at high level to supplement the ceiling lining

when required. Alternatively some acoustic 'tuning' can be achieved by wall-hung, full-length curtains.

- Doors and low level glazing must be designed with safety in mind. Entry and external doors must open outwards. Internal doors between main spaces require vision panels. Frames and door leaves should be flush with the wall face or have splayed reveals to minimise the risk of injury.
- Fire escape doors should have recessed panic push bars or flush-mounted push pads.
- High-level side windows provide evenly distributed natural lighting. End glazing should be avoided, as it is a source of glare for players and audiences. Lower level glazing or glazed doorways must be detailed for safety, which may entail fitting foldback solid panels.
- Safety glazing will be required and blinds, curtains or shutters should be fitted for film, drama and discos.
- Wall colour must be light enough to create a bright interior but not so light as to require frequent redecoration or give insufficient contrast to shuttlecocks. A reflectance value of 50% is ideal.
- Fire extinguishers, sensors or other items of equipment should be recessed or mounted in the corners of the hall to minimise obstruction and possible damage.
- School halls sometimes have wall-hung, foldout PE equipment and may also have retractable roof fittings. Community use necessitates recessing wall equipment and concealing it behind flush door panels.

### Ceiling and roof

- Incorporate an acoustic lining as part of the construction. It is false economy to ignore acoustic performance in the initial design and this oversight will lead to unnecessary expense later on. A reverberation time of 1.2–1.5 seconds at mid-frequencies is recommended.

- Exposed roof structure can add interest to the hall and help avoid a bland appearance. Keep the design simple to limit junctions and surfaces where shuttles and balls could become lodged and which create cleaning difficulties.
- Ceiling-mounted light fittings will give the simplest form of even distribution but should be mounted outside the badminton court sidelines.
- Ceiling colour should be white – approximately 90% reflectance value to minimise contrast and glare from the light fittings, and to reflect light downwards from high level wall glazing.
- If there is a roof void above the hall it can be used to house mechanical extraction equipment where it is necessary to provide sound attenuation to limit noise spillage from the building.



External and internal views of an urban sports community centre with main hall, fitness room and two all-weather play areas.



### Small hall

Supplementing the main hall with a restricted range of use. For sports, 9 x 9m or preferably 10 x 10 x 3.5m high is recommended and will accommodate the following activities:

- aerobics
- keep fit
- martial arts
- boxing
- table tennis (2)
- darts matches.

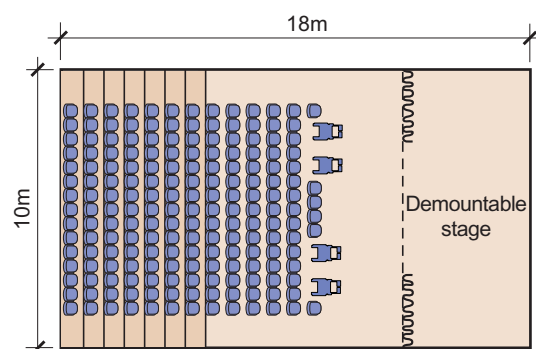
Other activities suitable for smaller halls include:

- drama workshops
- clinics
- club meetings
- luncheon clubs

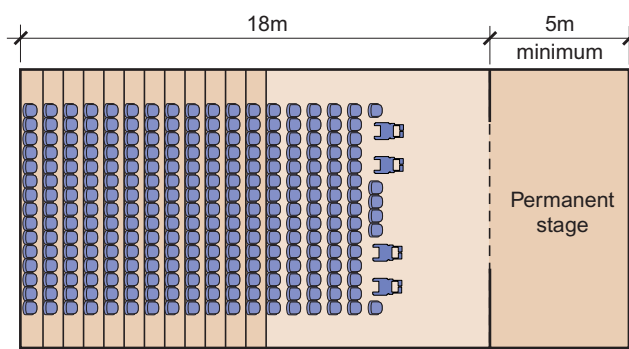
- playgroups
- craft shows
- whist drives.

Functional requirements are, in the main, the same as for main activity spaces. Safe design is vital as these rooms are often used by children:

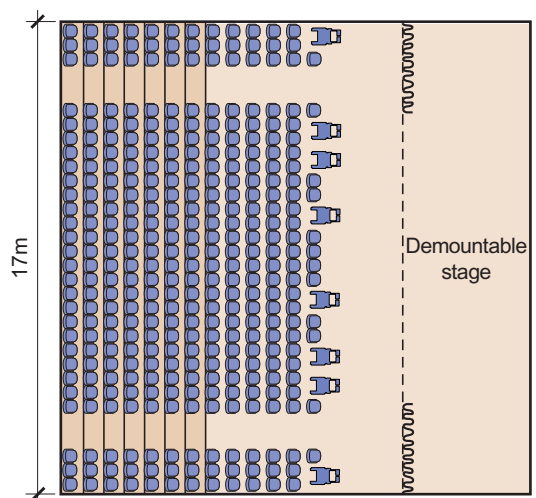
- floor: impact energy-absorbing
- walls: flush and smooth without projections – any low level heating panels must be flush-faced and sized for safe surface temperature
- windows: designed to give an even light spread and efficient ventilation
- ceiling: 3.5m should be maintained over the central part of the room and should incorporate acoustic treatment.



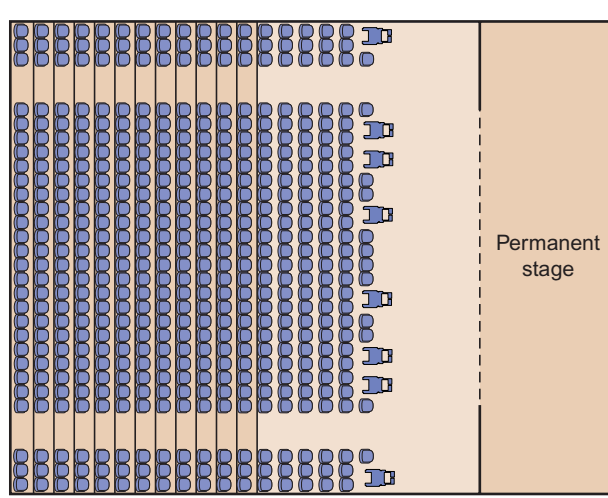
One-court hall – up to 186 seats



One-court hall with stage – up to 261 seats



Two-court hall – up to 356 seats



Two-court hall with stage – up to 496 seats

Seating arrangements in one- and two-court halls with temporary or permanent stages.

## Storage

Each multi-purpose room requires its own store for sports and play equipment and furniture. This is usually an open-plan space fitted with shelving but can include secure compartments for individual clubs' or playgroups' equipment. A fire-protected store with smoke detector and alarm may be required for certain items such as plastic foam mats.

- **Main hall:** generous storage is essential for a full range of activities. The minimum dimension for a badminton-sized hall is 40m<sup>2</sup> and more space may be required for stage props and other equipment. Doors must be wide enough to transfer the largest items. Consider incorporating a built-in sink and drainer to back up a temporary bar installation.
- **Second hall:** 10% of the floor area as a minimum requirement. Area can be saved and duplication avoided if both halls share a common store. Space will be used more efficiently if the floor is marked out for larger items of equipment.
- **Meeting and club rooms:** if there are alternative uses provide a store either in or close to the room.
- **Kitchen:** fitted low and high level units, some lockable, are generally all that is required.
- **Bar:** a permanent bar requires its own secure store with cold-water service and a wash-down gully.
- **Cleaner's store:** usually grouped with toilets or changing rooms and equipped with shelving and a bucket sink. Allow space for replacement items such as toilet rolls and lighting tubes and bulbs.
- **Refuse:** bins, empties and crates need to be secured in a compound that is usually located outside the building. Refuse vehicles should have direct access to the compound.
- **High level or attic storage space** can sometimes be utilised but access must comply with health and safety requirements.

The following table identifies some of the items that must be stored for a typical main hall:

Activity/function	Equipment
Badminton	Net and posts
Floor gymnastics	Crash mats
Judo	Crash mats
Martial arts	Crash mats
Table tennis	3 or 4 folding tables
Short tennis	Net and posts
Short mat bowls	2 or 3 roll-out carpets, mats and fenders
Demountable stage	Modular stage blocks
Banquets/displays	Folding tables
Seating	150+ stacking chairs

Storage will also be required for small items of sports equipment, clubs' and playgroups' individual equipment and the drama group's props and curtains. Crash mats must be stored in a separate one-hour rated enclosure vented to the external air and equipped with a smoke detection system.



**Bowls and badminton are the most popular hall sports. These two similar halls have excellent window and lighting arrangements.**

### Foyer

A foyer is essential, even for the smallest centre. This should be a comfortable meeting and assembly space where club and community notices can be displayed, a telephone located and giving access to toilets and the main hall.

The entrance should take the form of a draft lobby floored with barrier matting and must allow unimpeded access for wheelchairs. Storage space for pushchairs should be provided off the circulation area and separate cupboards for coats may be required.



**Disabled user access must be provided throughout the building.**

### Office

In rural locations day-to-day management is normally via a rota of voluntary keyholders supplemented when necessary by paid, possibly part-time staff. In all but the smallest facilities some form of staffing will normally be required to take bookings, collect fees, supervise volunteers and ensure that the building is safe and secure.

An office is often included as a base for staff, a reception and bookings point, a records store and a location for the master heating and lighting controls and fire alarm board. Alternatively a reception desk or kiosk backed by lockable storage cupboards may be sufficient. In either case location should be in or off the foyer with views to the building forecourt and into the main circulation space.

### Meeting and club rooms

These are smaller rooms but often multi-functional. If used by playgroups the usual care will be required in the detailing. The only sports potential is for table tennis and then only if room dimensions are at least 8 x 4 x 3m high. Billiards and snooker tables require a dedicated room of 7 x 5.2 x 3m minimum.

### Kitchen

Locate the kitchen to directly serve the main hall and at least one other space. Whenever possible, position the kitchen on an external wall. Usual requirements are a large domestic kitchen equipped with four-ring cooker, double sink, fridge, freezer, microwave oven and possibly a waste disposal unit. A separate washbasin must also be included. Design should permit:

- Sufficient space between fittings for several volunteers to work simultaneously. The design must be suitable for use by outside caterers at specific events.
- Fitting heights and space standards to suit helpers in wheelchairs.
- Serving hatches with inward opening foldback doors and an uninterrupted surface to prevent spillage.
- Robust, low level shelving beneath the servery worktop if the kitchen is to double as a temporary bar.
- Provision of mechanical air extraction.
- Easily cleaned surfaces that minimise impact noise and a non-slip floor finish.
- Direct access to refuse bins.

### Bar

A licensed bar can generate revenue to help offset running costs but may involve the appointment of extra staff. Additionally, increased security measures will be necessary throughout the building. Provision of a permanent bar can infringe charitable status so must be carefully assessed in the business planning process.



Local breweries may assist with fitting out costs. Temporary bars with an occasional licence are often the most practical answer for smaller halls.

## Toilets

Plan male, female and disabled people's toilets close to the entrance foyer and consider the need for adjoining coat hanging space. The following figures taken from BS 6465: Part 1 1994 can be used as a guide:

### Female

- 2 WCs for up to 50 persons
- 3 WCs for up to 100 persons
- 1 WC for each additional 40 persons
- 1 washbasin plus 1 per 2 WCs.

### Male

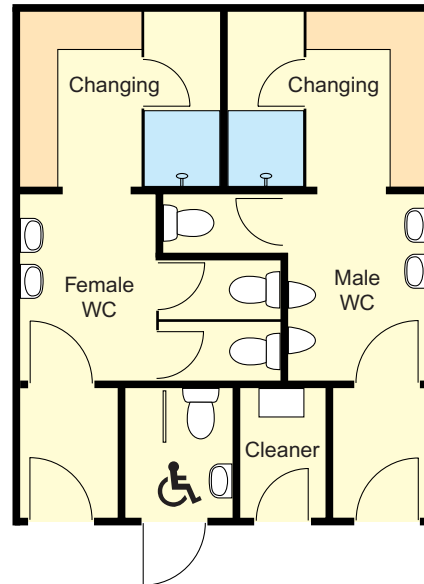
- 1 WC for up to 250 persons
- 1 WC for each additional 500 persons
- 2 urinals for up to 100 persons
- 1 washbasin per WC plus 1 per 5 urinals.

There should be at least one toilet for wheelchair users. Minimum dimensions for a unisex disabled people's unit are 2.0 x 1.5m. Increase size to 2.5 x 2.0m for an integral shower and changing bench. The door must open outward. A separate Guidance Note covers disabled requirements in detail.

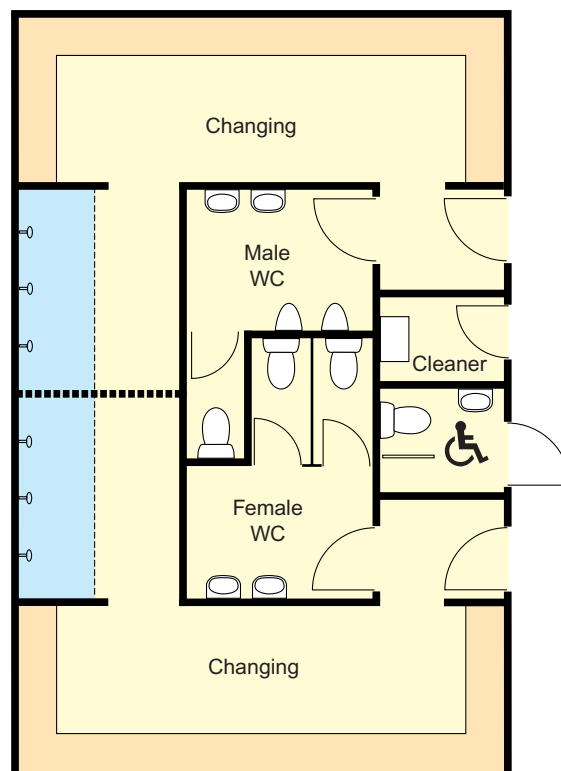
In addition there can be a requirement for:

- Children's toilets arranged off a room to be used for playgroups. Fittings will be of reduced size and there should be a nappy changing surface. Alternatively, provide nappy change in the disabled people's WC.
- A separate WC cubicle and washbasin in each changing room for use of players and performers.

All surfaces must be durable and easily cleaned. Cantilever basins mounted on a duct to conceal pipework are most easily maintained. If soap dispensers are required they can be located between basins.



Nominal changing provision accessed through the toilet area – acceptable only in the smallest schemes.



Another compact arrangement but main toilets could be provided separately where changing also serves as dressing rooms for stage productions.

## Changing rooms

Buildings with main and secondary halls require between six and 12 changing spaces located close to a backstage area for male and female sports users and performers. Increased provision can be considered if there are adjacent tennis courts and will be needed if netball or cricket teams use the facilities or if there is an all-weather, multi-games area. Where there are grass pitches provide separate team-sized changing rooms.

Showers should be allocated on the basis of one for every six changing spaces for indoor use, and one for three to four changing spaces for outdoor sports.

Changing should be designed with adequate space for wheelchair access and with 0.45m deep benches cantilevered from the wall to ease floor cleaning. Allow 0.5m width of bench per person. Minimum plan dimensions are 2.5m benchback to benchback or 1.5m benchback to wall face.

Screened entrances are essential and showers and dry-off areas must be located at the far end of the changing rooms. Lockers are normally only required in urban locations or where there are multi-use outdoor facilities.

Finishes must be robust and easily cleaned. Daylighting will brighten up these small spaces but mechanical ventilation is essential for the showers. Changing room design is covered in more detail in a separate Guidance Note, *Pavilions and Clubhouses*.



**A recently built village hall with an external form and finishes to suit its rural location.**

## Environmental services

High levels of comfort are essential to ensure full utilisation of the facility. People will not be encouraged to leave their homes in inclement weather or on dark evenings if they have to face a poorly heated and ventilated or gloomy environment.

Flexible response heating, lighting and ventilation systems are needed for activities ranging from strenuous to sedentary, some requiring high lighting levels and others only background lighting.

Parts of the building will attract only intermittent use so separate heating circuits should be considered and automatic controls deployed to ensure that systems are turned down or switched off when accommodation is unoccupied.

## Heating

- A low-pressure hot water system fed from a central gas-fired boiler provides the best combination of flexibility and economy. Oil is an alternative on sites where gas is unavailable.
- Main hall heat sources need to be visually unobtrusive and deliver comfort conditions to these relatively high spaces. Under floor heating systems, ducted warm air or radiant panels above door head height are generally the most effective solutions.
- Pipe circuits in buildings with a central boiler should group together compatible zones. In schools or sports centres the community content should be zoned and metered separately.
- Electric convector or radiant heating is inexpensive to install but can incur high running costs even when operated with sophisticated controls.
- Master controls should be in a secure place by the final exit from the building.
- Whatever form of heating is used it is essential to have high levels of insulation and a well-sealed building envelope. The entrance doors should incorporate a draft lobby to help retain the thermal capacity.

## Lighting

- A presence detection system should be used throughout the building for all primary light sources. Time clock or sensor control will be required for external illumination.
- The main and small hall will need an overall lighting system and will benefit from secondary 'decorative' lighting.
- Main hall lighting must not be mounted directly over the badminton court. Compact fluorescent fittings provide the best combination of economy, good colour rendering and ease of control.
- When it will be used for drama productions ensure the hall is equipped with power points located for temporary stage lighting installation.
- Emergency lighting will be required.

## Ventilation

- Arrange windows to provide efficient ventilation with adequate security. Consider the benefits of controlled cross-ventilation throughout the building.
- Natural ventilation should be used wherever possible but kitchens, toilets, changing

rooms and showers must have mechanical extraction.

- Fans and ductwork may have to be extended to the public areas if noise spillage from open windows is likely to be a problem.
- Fit changing room showers and the kitchen with humidistat switching to ensure proper ventilation with over-run.

## Power

- Residual current circuit breakers should be specified for safety and guarded sockets are required where playgroups meet.

## Water services

- Usually, water demand is low except when showers are included. Individual water heaters or a multi-point heater can offer economies over stored hot water supplied from a central boiler.

## Protection

- Lightning protection may be advisable in certain rural locations where the isolation and height of the hall may make it vulnerable to lightning strikes.

Space	Temperature °C	Illuminance lux	Air change rate per hour
Main hall	12–20	300–400	1.5–3.0
Second hall(s)	18–21	300	1.5–3.0
Lounge(s)	21	200	
Foyer	18	200	
Office	21	500	
Bar	21	100–200	
Bar store	10	100	
Kitchen	18	500	20
Equipment store	10	100	
Changing rooms (toilets)	20–21	100	6–10

Summary of typical service performance levels.

- Electronic security sensors and alarms are appropriate on some sites, particularly where alcohol is stored. Proper fire protection must be included.
- Windows may require additional protection. Electrically operated external rolldown shutters offer the most effective security. However, their appearance when the building is closed must be carefully considered.

### External play areas

#### Playground

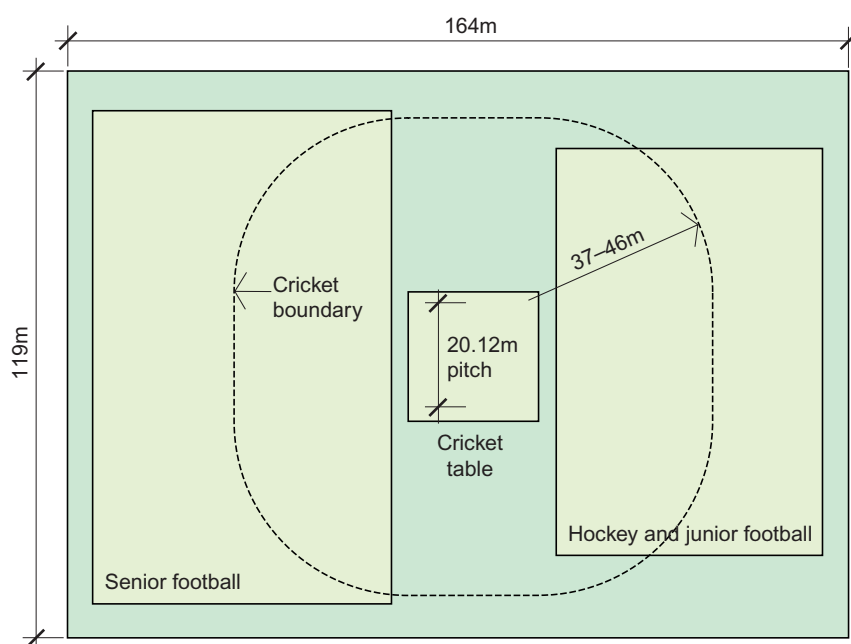
- Securely fenced and safely surfaced play area on the sunny side of the building approached from the room where playgroups meet. Ensure that some sun shading is incorporated in the design.
- Safe detailing is most important, especially around the access doors and thresholds. Make sure windows cannot be opened into the path of children.

#### Multi-use games area

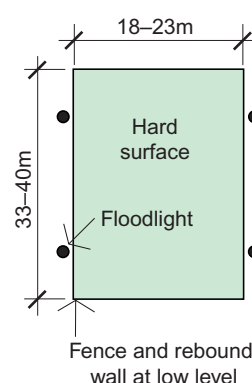
- A tennis court-sized, fenced, all-weather play area greatly extends the scope for sport and takes the more robust activities outside the building. It should be linked to the changing exit by a paved route suitable for wheelchairs and will benefit from floodlighting if planning conditions permit.
- An external equipment store can be incorporated into the building accommodation where it will be more secure and less obtrusive.

#### Grass pitches

- Good drainage is essential and correct orientation, around a north/south axis desirable. Include separate team changing rooms and officials' rooms. The sizes and construction of grass and synthetic playing surfaces for sport are covered in detail in separate Guidance Notes.



Typical layout of cricket field and winter games pitch.



#### A floodlit, fenced games area

Suitable for:  
 Five- and six-a-side soccer  
 Netball  
 Six-a-side hockey  
 Short tennis  
 Basketball  
 Roller skating

#### Dimensions for pitches.



**A semi-sprung hardwood floor is ideal for sport and play.**

Sport England aims to lead the development of sport in England by influencing and serving the public, private and voluntary sectors. Our aim is:

**more people involved in sport**

**more places to play sport**

**more medals through higher standards of performance in sport**

#### **Sport England Disclaimer**

Every effort has been made to ensure the accuracy of the information contained in this publication. Sport England, its servants or agents shall not at any time, in any circumstances, be held responsible or liable to any party in respect of any loss, damage or costs of any nature arising directly or indirectly from reliance placed on the material in this publication, or any other guidelines or policies issued by Sport England. This information has been prepared as a basic guide only and should not be viewed as a substitute for obtaining comprehensive expert or professional advice.

This guidance and Sport England policies on Lottery funding applications are subject to change from time to time, including variations required to comply with governmental directions on the application of Lottery funds. Sport England reserves the right to amend, supplement and/or discontinue, at its absolute discretion for whatever reason, any or all of the guidelines set out in this publication.

There are a number of Guidance Notes on related matters. A current list is available from:

Sport England Publications  
PO Box 255, Wetherby LS23 7LZ  
Tel: 0990 210255. Fax: 0990 210266  
Minicom: 0870 1207405.  
E-mail (order enquiries only):  
sportebbooks@twoten.press.net

© Sport England, January 2001  
SE/1038/5M/01/01  
16 Upper Woburn Place, London WC1H 0QP  
Tel: 020 7273 1581. Fax: 020 7273 1710  
www.english.sports.gov.uk



Sport England is the brand name of the English Sports Council which is the distributor of Lottery funds to sport.

Design concept by GDA Creative Solutions  
Produced by NBA Tectonics  
Printed in England by the Westside Group



Ref: 1038  
£10  
ISBN 1 86078 130 6