# Sportshall dividers - everything you need to know

Andy Aley - 27th May 2014

The primary purpose of sports hall dividers is to create a partition between adjoining courts. Sportshall dividers will enable the operator the opportunity to maximise usage of the total playing area offering a degree of privacy and to retain balls in a particular area(s). In schools sports halls it will allow teachers to have more than 1 class or lesson going at the same time.

## Types of netting

There are various different types of sports netting and screens available which can provide the necessary and required division.

- Standard division nets are by far the most common divider which provides total screening at low level and ball stop netting to the remain height. Typically the height of the solid canvas for a standard division is 2m high which is sewn into the netting above. This typical sportshall net is ideal for any sportshall or sports centre that needs to segregate courts, or areas, to provide privacy, reduce distractions from other areas, and retain average velocity projectiles within the playing area.
- Net only dividers are a common feature in tennis halls and centres. Generally net only divider nets are supplied complete with a sewn in weighted bottom edge and are installed so there is roughly 250-300mm of net draped on the floor. Nets with a weighted bottom edge, aka lead line, plus the drape on the floor will help stop the average velocity ball from rolling under the net. These nets simply act as a barrier and stop projectiles travelling into adjacent courts but do not offer any privacy.
- Full height canvas dividers are used to provide total screening from adjacent courts to full height offering a complete visual barrier with maximum privacy. These curtains offer a small reduction in noise from other areas, but only slightly. Usually found in badminton halls and centres these full height canvas or solid dividers also are used as a backdrop when installed against a wall which is ideal for badminton players especially if there are high level windows.

## Lanyard cords

Lanyards cords are supplied and fitted into the net during manufacturing and they provide added strength to a standard sports hall division nets. A cord is suspended from the track way trolley and then attached to the top of the sight screen at low level to support the canvas. The use of these supporting lanyards will maximise the life expectancy of the division net due to the fact that the weight of the canvas screen is taken away from the mesh netting. Without lanyard cords the net would misshape and sag much quicker causing the entire net to deteriorate and need replacing sooner. Obviously net only or full height canvas dividers do not have lanyard cords.



MUGA's

## FR treatment

All sports hall canvas must be Flame retardant treatment to BS 5867 part 2 type B performances.

**Note:** All division nets supplied by Sports Facility Services are supplied with fitted lanyard cords as standard, and undergo FR treatment to the mesh and canvas to the required standard.

#### Mesh sizes

Mesh sizes are dependent on the required purpose and the actual sports played. Sports netting is supplied in a range of standard mesh sizes and varying thicknesses depending on the application. Standard mesh sizes are:

- 22mm also known as squash or golf netting
- 50mm which is the most common size for sportshall netting and cricket netting
- 100mm, but this is rarely used
- 125mm also known as football netting

The size of mesh netting depends entirely on the application and sport(s) to be played. The price almost works out pro rata i.e. 22mm mesh is twice the cost of 50mm mesh, naturally because there is practically twice the amount of raw material. When deciding the type of net required you need to consider it purpose and what projectiles does it need to stop.

#### **Dimensions**

All nets are manufactured to suit site conditions and individual circumstance. In line with current Sport England guidelines the optimum or minimum height for a sport shall divider is 7.6m from the finished floor level to the underside of the track. Any length of divider can be supplied but we would recommend up to a maximum of 22-25m long to allow the average person to be able put the net into the storage bag. If the total length division required is say 33m we would recommend two nets of equal size with independent storage bags. Any bigger that 25m then users will have difficulty putting the divider in its storage pouch/bag.

# Storage bags

Also known as storage pouches are supplied with all sports netting where required. They are available in any size but invariably for sports hall dividers they are 1m wide x 1.2m high. This allows adequate space for easy storage and we believe our design is easier to use than the outdated 'sock' type pouch. Storage bags are supplied in blue or green PVC as standard but specific colours are available on request.

- Wall fixed bags are simply fixed to the wall with rawl hooks or appropriate fixing to suit the wall structure. The hooks must be above 2m high in accordance with safety guidelines.
- Winch-able bags are supplied where necessary to enable the bag with the net in it to be hoisted above obstacles or doorways. A simple rope, pulley and storage cleat system is used to provide a manual winch operation.





#### **Colours**

Netting is typically supplied in green or blue as they are neutral and non-distracting colours ideal for areas where sport is played. However, dying techniques allow suppliers to offer a whole range of colours, but this will have a financial impact and cost more than the standard colours readily available. Green and blue is kept in stock by most manufactures so can be supplied relatively quickly, whereas non-standard colours take longer to manufacture due to the extra process or procurement required. Although white netting is also readily available I would not recommend white for the purpose of dividers as it will potentially be difficult for badminton players to keep site of shuttle cocks. Unless there is a specific need or specification within a sport or competition rules for a non-standard colour then I would always advise green or blue dividers, which have been the norm for many years.

A contrasting colour to the walls and floor is necessary and will aid users to differentiate the wall, floor and divider, in particular this is essential for visually impaired users. Now it is a natural train of thought to think that "as the walls are blue so we'll have a blue net." Yes colours need to look right, but we're not decorating an office, we are providing a piece of equipment for use in a sports hall. Contrasting colours are essential so they are user friendly. For the more discerning athlete and game player a contrasting colour can be easily picked out noticed in the peripheral sight when moving at speed.

Solid canvas screens is the same scenario - green and blue readily available.

## Support systems

Generally sportshall divider net are retractable so they can be used as and when required. However they don't have to be and it is common for a dividers to be in a fixed position, especially when they are used as back drops against a wall or nets in front of viewing balcony.

- Track and trolleys is by far the most common method for dividers. The use of heavy duty aluminium trackway supported by steel brackets which are fixed directly to the main roof structure. The dividers are attached to trolleys (aka rollers or runners) which glide inside the aluminium profile. Nearly all support brackets come for a standard generic design and are manufactured to suit site specifics i.e heights, widths etc. However bespoke track supports are designed and manufactured to overcome unusual scenarios. In essence support brackets can be fixed to any part of the roof structure but ideally they should be fitted to a main roof steel or roof purlins. The track should be supported at a maximum of 4-4.5m intervals and have sufficient/added support at the storage location. Ideally wall fixed brackets are used at each end to provide maximum stability.
- Cable systems is the typical method used in tennis centres and where nets are considered light weight. The total span must be considered as it is near on impossible to achieve a totally level suspended cable so invariably the cable is supported at the centre point and where the nets need to be retractable a pair of nets are supplied which meet in the middle. Cable is an ideal and economical solution for divider, both net and canvas that are considered as a permanent fix i.e. do not need to be retractable. However I would not recommend the use of cable for a standard sports



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hall division net or full height canvas due to the weight imposed on the cable which causes natural sagging and difficulty for retracting to the storage location.

#### Location of dividers

There is practically limitless configurations and layouts that dividers can be installed, and it is almost possible to install a divider almost anywhere within the hall. The location of the divider can be a straight forward decision, such as in a 4 court hall where they situated in the centre if the hall across the width. The most obvious choice to create 2 equal halve each with 2 badminton courts.

It is also common practice to have a division net to divide the hall into 3 & 1 courts. Generally this will enable the user to segregate the sports hall to provide an enclosed area for trampolining whilst leaving the remainder of the hall free for any other activity.

Sports hall dividers are used further to separate relevant areas in larger sports halls. A 6 court hall is likely to have a divider net that breaks the hall up into 4 and 2 courts and probably also a central divers across the width. An 8 court hall for example wold generally have a divider the full length down the middle to create to 4 court halls.

There are many different configurations possible for sportshall dividers which will depend on the final plan to maximise the usage of the venue. Crossover units to intersect cricket tracks can be supplied as well as curved track units. Both of which are designed to allow for almost any configuration.

## Other services

Overhead services must be taken into consideration when planning the layout for other services within the roof space. The track layout and supporting system must be co-ordinated with all other M&E services i.e. lights, pipes, flues and heaters etc. We advise that the netting track is the lowest item within the roof structure and where netting track passes directly underneath ambi-rads it must be a minimum of 600mm below. If this cannot be achieved then heat deflectors will be required. It is important to note that the height of the track is entirely governed by the lowest point of the roof structure. It is not uncommon for people to say they have a hall that's 10m high so 7.6 is no problem - but what they fail to realise is that 10m is at the highest point or pitch of the roof - not the height to the lowest point at the eaves. I've forgotten how many times light and conduit have been put in at the same height as the required net height! Early planning and co-ordination between of M&E services and netting is essential.

#### Service and maintenance

To protect operators investments we recommend a high level track and net service should be carried out annually. The service will involve getting up high level to check functionality and integrity. All fixings are checked for tightness to ensure stability, correct lubrication is applied to the track and runners and sight screens are levelled. The levelling of sight screens will be done using lanyards if they are fitted otherwise the net will simply be raised.

## Operation

Over the years we regularly get asked 'how should I pull the nets out'. We have offered our advice and demonstrated correct use on many occasions. The following is an extract from our O and M manual:





# **Operation Instructions**

- > To use the division net unhook the fabric straps from the wall-mounted hooks on the PVC storage pouch and allow the net to "drop" to the floor.
- > One person is then required to take hold of the leading edge and ensuring the area is clear walk back to fully extend the net to the end of the track.
- > It is important to walk directly below the run of track and not to pull net to one side which may cause snagging and possible damage.
- > When storing nets DO NOT gather the leading edge and walk down the length of the
- It is essential that the operator goes to the storage end and gather the net in. This will ensure that the trolleys do not "bunch up" at high level and snag.
- > Once nets are fully drawn back to the storage wall they should be "scooped" up into PVC pouch and the fabric straps re-secured on the hooks.

If the net does get stuck for any reason we advise you draw the net back in the direction it came from and try again. Do not keep pulling or tugging the net in the position it's stuck in. This has the potential to tear or cause damage to the net if tugged too hard. Provided the net and system is regularly maintained and used correctly you should achieve many years of use.

#### Conclusion

Sports Facility Services is the specialist sports netting supplier and installer. Our staff has carried out hundreds of netting installations in many different building designs and provided solutions to many an obstacle along the way. Engaging with Sports Facility Services at the early planning stages will no doubt save headaches and the potential of costly re-works.

We hope you found this information useful and please remember these are generalisations based on typical installations. Please also refer to our brief information sheet and typical detail drawings available in our technical section.

If you have any particular questions or have a particular project you wish to discuss we would be pleased to hear from you. Please also visit our technical area for typical details and specifications.

