

## Introduction

Soben® MP-1000/MultiPro® is a calcium silicate board reinforced with selected cellulose fibres and fillers. It is 100% free from asbestos, sepiolite, inorganic fibres or formaldehyde. The board is versatile and suitable for use in a wide range of internal and semi-exposed external applications in building construction projects. It is an economical building board material with fire-proofing property to replace concrete or block wall for the construction of non-load bearing elements. Unlike most plywood, cement-bonded particle board, gypsum boards or magnesium boards, Soben® MP-1000/MultiPro® is light weight, strong and moisture resistant which will not warp, swell or decay in wet area. The board is manufactured to ISO 9001 quality management system and ISO14001 environmental management system, and has obtained the Green Product Label Award issued by National Environment Protection Bureau.

## Description



Soben® MP-1000/MultiPro® is off-white in color, and has a smooth finish on one side and a slightly textured reverse. It consists of calcium silicate matrix, fire rated mineral is reinforced with selected fibres and special fillers. The board is cured under an autoclave process where high pressure and high steam is induced to ensure a complete chemical reaction, thus providing the board with excellent dimensional stability and chemical resistance.



Soben® MP-1000/MultiPro® contains no water soluble additives and will not rot, degrade or deteriorate. The board will absorb water causing some loss of strength, which is fully recovered on drying. Any staining on the panels caused by leakage can be easily painted over. Moisture will not cause leaching or efflorescence and has no permanent effect on the board.

Soben® MP-1000/MultiPro® is non-combustible when tested in accordance with AS 1530, BS 476: Part 4, 5, 6 & 7, BS EN 1364-1 :1999, BS EN ISO 1182: 2002, BS EN ISO 1716: 2002 and GB8624. The board provides a degree of thermal insulation and is resistant to continuous operating temperature up to 100°C. Soben® MP-1000/MultiPro® dry wall system complies with the requirements of BS 476: Part 22, 1987 and BS EN 1364-1: 1999 for 2 hour fire rating partition in integrity and insulation and GB/T 9978 1999 for 2 hour fire rating partition with integrity and insulation.

## Sizes

Thicknesses	6 / 9 / 12 / ~ 25mm
Widths	900 / 1200 / 1220mm
Lengths	1800 / 2400 / 2440mm

Note: All standard boards come with cutting square edges. Recessed edges may be available upon request. Other sizes are also available and can be produced to special order.



# Manufacturing Tolerances

Length tolerance	+/- 5mm
Width tolerance	+/- 5mm
Thickness tolerance	+/- 0.3mm
Diagonal tolerance	+/- 5mm



Fire testing to Soben® MP-1000/MultiPro® partition

# Performance

Density	1000 kg/m <sup>3</sup> (+/-10%)
Weight (approx.)	6.6kg/m <sup>2</sup> – 6mm 9.9kg/m <sup>2</sup> – 9mm 12.6kg/m <sup>2</sup> – 12mm
Surface alkalinity	pH 7-10
Flexural strength (along grain)	7.0 MPa
Flexural strength (across grain)	10.0 MPa
Moisture movement (ambient to saturated)	0.05%
Moisture content	Ex works - 15% In situ - 6%
Sag when suspended at 610mm span	<1mm
Thermal conductivity	0.16 W/mK
Thermal movement	5 x 10 <sup>-6</sup> m/m.C
resistance to continuous heating	80°C
Non-combustibility	AS 1530.1 BS 476: Part 4 : 1970 BS EN ISO 1182 : 2002 GB 8624 – Grade A
Heat of combustion	BS EN ISO 1716: 2002
Building regulations classification	Euro Class A1
Surface spread of flame	BS 476: Part 7, Class 1
Fire propagation test	BS 476: Part 6, Class 0
Test for ignitability	BS 476: Part 5, Class P
Fire rated partition tested to	BS 476: Part 22 - 1 hour FRP BS EN 1364-1 - 1 hour FRP GB/T 9978 - 2 hour FRP
Minimum bending radius (along grain)	4800mm for 6mm 7200mm for 9mm 9800mm for 12mm
Sound attenuation	30 dB for 6mm board 38 dB for 9mm board 42 dB for 12mm board
Acoustic reduction (over range 100-3150 Hz)	Average 22 dB Rw 45 dB for 91mm thick partition Rw 48 dB for 99mm thick partition Rw 55 dB for 123mm thick partition Rw 60 dB for 214mm thick partition

Curved partition



## Specific Properties



Moisture resistance



Acoustic insulation



Lightweight but strong



Small expansion rate



Non-combustible  
BS 476 : Part 4  
BS EN ISO 1182  
Euro Class A1



Decorative finishes  
by tiles, paint or wall  
paper



Rot proof, anti-bacterial,  
resistance to insects or  
mould growth



Maintenance  
friendly



Good chemical  
resistance



Easy to use



Bent to shape



Immune to attack  
from insects or  
vermin

## Application

Soben® MP-1000/MultiPro® can be used in a wide variety of building applications due to its easy working, fix and decorating characteristics. Typical applications include:

- Fire rated walls
- Dismounted dry wall systems and acoustic partitions
- Fixed smoke curtain / barrier
- Decorative and moisture resistance ceiling
- Curved architectural ceiling
- Bathroom and shower partitions
- Base board for vanity top and water basin in kitchens and laundries
- Access panels in wet area
- Backing boards for tiles or marbles or claddings
- Fire rated industrial wall linings
- Aesthetic casings for electrical & mechanical building services
- Facades, underlay to roofs
- Parapet linings
- Composite panels
- Perforated finishes
- Semi-exposed applications such as eaves, soffits and sunscreens



Smoke barrier



Moisture resistant ceiling



Building services enclosure with exterior paint finish

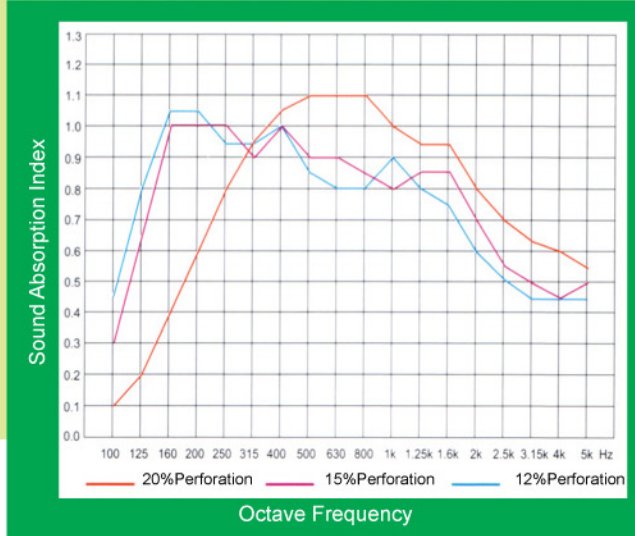
For details of Soben® MP-1000/MultiPro® fire rated partition / enclosure system, please refer to the Installation Guide of fireproofing construction or contact your nearest Soben International Office.

# Acoustic Performance



Soben® MP- 000/MultiPro® provides an economical solution for both acoustic ceilings and partitions. A perforated panel when used with fibreglass or mineral wool will provide an excellent sound absorption media. This have been widely used in opera house, conference room and lecture theatres all over the world.

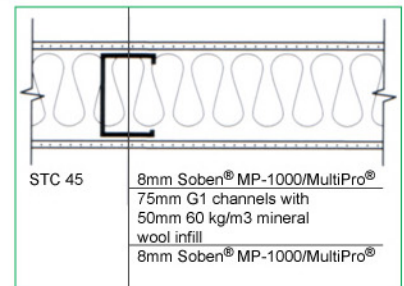
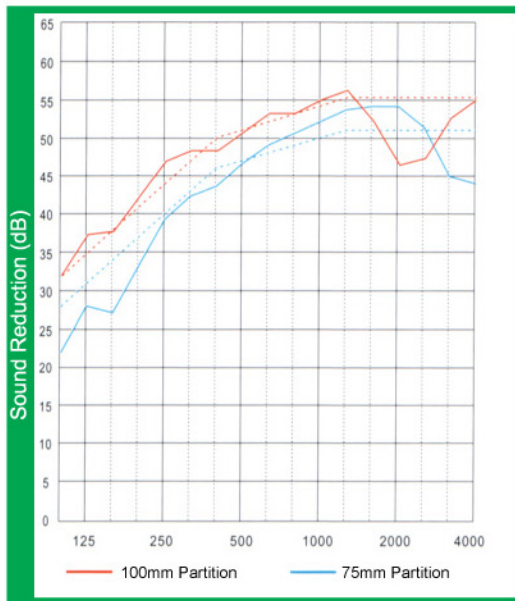
Acoustic Performance of Soben® MP-1000/MultiPro® Ceiling / Partition System



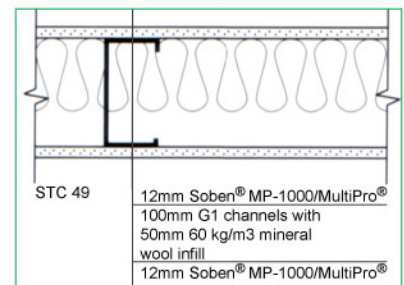
Soben® MP-1000/MultiPro® Sound Absorption Panels



On the contrary, Soben® MP-1000/MultiPro® is a good sound insulator which when suitably constructed with steel stud infill with mineral wool or fibreglass, it will achieve a sound transmission class upto 60dB (STC 60).



Partition Details



For details of Soben® MP-1000/MultiPro® acoustic partitions, please contact your nearest Soben International Office.

# Health & Safety

Soben® MP-1000/MultiPro® is formulated without asbestos or sepiolite or any inorganic fibres. When using power saws or sanders in a confined space, dust extraction equipment is recommended to control dust levels. Soben® MP-1000/MultiPro® is designed for non-load bearing construction. Horizontal boards or ceiling panels must not be walked on as they are not designed to take additional loads between supports; if there is a risk of this occurring, warning notices should be displayed. Fixers must ensure that they work from adequate and safe platforms where necessary.