

Properties & Performance

Description

Durasteel is a composite sheet comprising of a core of fibre cement with an outer facing of perforated galvanised steel sheet mechanically bonded to the core.

Standard sizes

2500mm x 1200mm
 (8'4" x 4' approx)

Finishes

Sheet: Galvanised mild steel or Stainless steel.

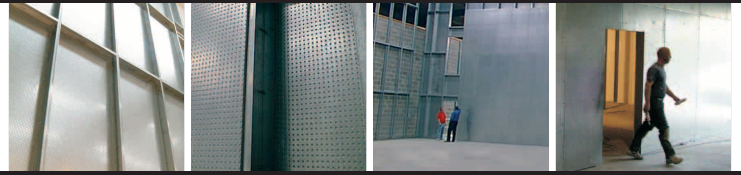
Systems framework: Galvanised or stainless steel.
 Primed steel work

Doors: Blue zinc based primer.

Special finishes available on request



Weight	9.5mm 20.0kg/m ²
Strength	
Flexural Strength (425mm span)	65 N/mm ²
Apparent modules of elasticity (425mm span)	30.9 kN/mm ²
Impact Strength (BS 5669: Part 1)	44.15 J
Impact (withstand)	4000 J
Impact resistant (projectile)	2793 J
Moisture	
Natural moisture content by weight	7-8%
Thermal	
Thermal conductivity at 20°C (BS 874)	0.55 W/Mk
Radiant heat reduction through panels	9.30 to 2.53 Km/M ²
Acoustic	
Sound reduction index	29.9 dB
Fire	
Non Combustible to BS 476 parts 4 & 11 Building Regulation classification	Non Combustible Class 0



Systems Features

General

- Tested to BS476: Part 20. Invicta Durasteel single skin barriers offer protection to 4 hours fire protection standard.
- The barriers are lightweight in construction 9.5mm thick (3/8") and easy to assemble. Barriers can be extended, dismantled and relocated if required and used time and again without and adverse effect to it's performance.

Durasteel Sheet

- Durasteel is a composite of fibre-cement with perforated metal sheets. It is non-combustible and lightweight and is widely used in the construction of fire resisting structures. It is unaffected by moisture and when saturated its fire performance remains unimpaired.
- Exceptionally robust. Durasteel sheet is resistant to impact damage and once installed, requires minimal maintenance. Durasteel sheet and constructions have been widely tested by independent authorities.
- Durasteel is used widely in the offshore petro-chemical and ammunitions manufacturing industries which make use of its blast protection properties.
- Fully insulated system can be supplied to meet specifications if required.

Heat Radiation Chart

TEMPERATURE READINGS

(at completion of the test)

Furnace temperature during a 4 hour fire test:

1 Hour	=	925° c
2 Hours	=	1029° c
3 Hours	=	1090° c
4 Hours	=	1133° c

500mm (20") from face

1 Hour	=	42° c
2 Hours	=	61° c
3 Hours	=	69° c
4 Hours	=	77° c

100 mm (4") from face

1 Hour	=	115° c
2 Hours	=	136° c
3 Hours	=	146° c
4 Hours	=	147° c

