

Wedge India

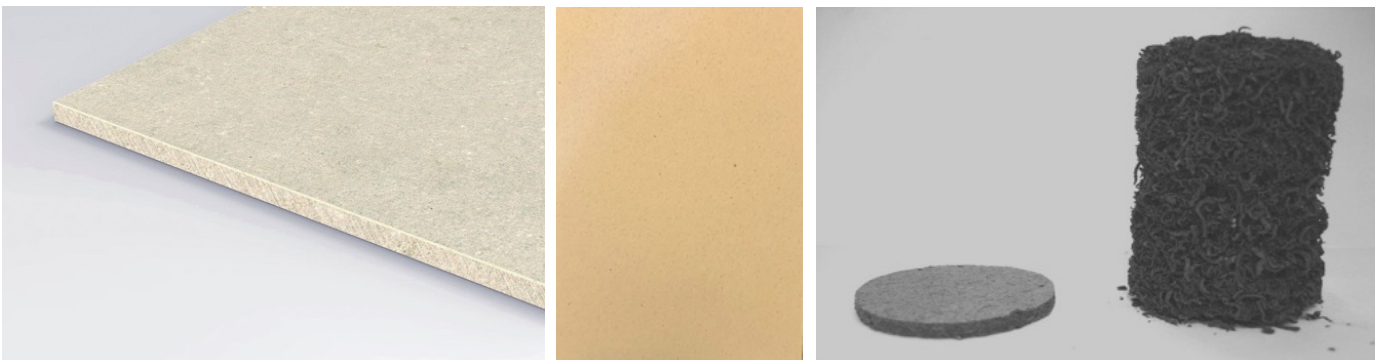
Fire Doors Assembly Components

FD30 | FD60 | FD120 | FD240





- ✓ Fireproof Calcium Silicate Boards
- ✓ High Density Mineral Wool Boards
- ✓ Fireproof MgO Boards
- ✓ Fireproof Perlite Boards
- ✓ Intumescent Fire Seals

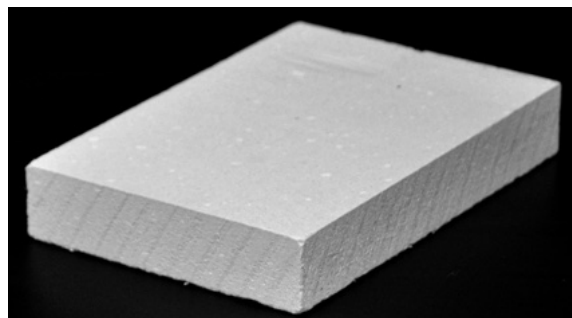


Wedge StarPan SP1150 | Fire Door Calcium Silicate Board

Wedge StarPan SP1150 board is high density high performance fire resistant calcium silicate board for manufacturing Fire Doors of fire rating up to 120 minutes with 2 layers of 9 mm thickness and 60 minutes with one layer of 9 mm thickness. SP1150 grade calcium silicate boards are manufactured with high temperature resistant insulation fibers reinforced with calcium silicate to provide thermal resistance upto 1400 degree in case of fire. It offer extremely longer life more than 30 years.

Applications

- Manufacturing Fire Resistant Doors 120 Minutes
- Fire Resistant Acoustic Door
- Access Panel & Trap Doors
- Lift Doors & Fire Escape Area
- Aesthetic curved ceiling
- Moisture resistance ceiling Backing wall for wet area ceramic tiling
- Casings for building services
- Fire rated backing board for metal claddings
- Fire rated industrial wall linings
- Perforated finishes for acoustic space
- Fire resistant barriers and spandrels
- Fire protection to concrete structures



Specification	
Density	1150 kg/m ³ +/-10%
Nominal weight	6.6 kg/m ² -6mm
	9.9 kg/m ² -9mm
	12.6 kg/m ² -12mm
	*other thicknesses of board may be produced to special order
Size	1220 x 2440mm 1200 x 2400mm *All boards come with cutting square edges. Recessed edges can be produced upon request.
Color	Natural off-white
Finish	Sanded smooth surface on one side & slightly textured reverse
Manufacturing Tolerances	Length +/- 5mm
	Width +/- 5mm
	Diagonal +/- 5mm
	Thickness +/- 0.3mm +/- 0.6mm *greater board thickness
* Standard full sized board & maximum thickness = 25mm	

Thermal Conductivity	≤0.15	W/ (m•k)
Water Contain	≤10	%
Moisture Movement	≤0.25	%
Heat Shrinkage	≤0.5	%
Bending Strength	≥10	Mpa
	≥8	Mpa
Ratio Of Cross And Parallel Bending Strength	≥58	%

Thickness (mm)	Standard dimensions (mm x mm)	Number of boards per pallet	Surface per pallet (m ² /pallet)	Weight per pallet (approximate kg)
6	2440x1220	92	273.8	1720
9	2440 x 1220	61	181.5	1688
12	2440 x 1220	46	136.9	1698
15	2440 x 1220	36	107.2	1662
20	2440 x 1220	27	80.4	1664
25	2440 x 1220	22	65.4	1681

FP1000 | High Performance Fire Door Calcium Silicate Board

FP1000 is high temperature resistant Calcium Silicate Insulating board with 240 minutes fire rating. FP1000 boards are made of high temperature resistance fireproof materials, cement, and calcium silicate based asbestos free minerals. These boards are large sized and very easy to handle and work for the production of mechanically strong, self-supporting constructions.

Features & Benefits

- Maximum short term temperature resistance up to 1200 Degree C.
- High fire resistance up to 240 Minutes with maximum 10 mm thickness.
- Continuous operating temperature resistance up to 450 Degree C.
- Longer guarantee life more than 15 Years.
- Good thermal insulation.
- High acoustic insulation.
- Unaffected by humidity.

Applications

- Structural steel protection, Self-supporting ceilings.
- Dryers & Oven Insulation.
- Industrial Furnaces, Apparatus Construction.
- Wet and Damp Rooms.
- Timber floor protection, upgrading of timber floors.
- Cladding to steel ducts, self-supporting ducts.
- M&E services enclosure, Smoke barrier, parapet/spandrel wall.
- Access panels and hatches, fire doors.
- Tunnel lining, concrete/brick floor and wall upgrading.
- Fire Door manufacturing for FD30, FD60, FD120, FD240.



Technical Properties

Properties	FP1000	FP1150
Color	White / Grey	White / Light Brown
Short Term Service Temperature °C	1200	1000
Classification Temperature °C	400	100
Density, Kg/M3	880 – 900	1150
Thermal conductivity, W/m.K		
	20 °C	0.16
	100 °C	0.18
	200 °C	0.20
Tensile Strength, Mpa	5	4
Flexural Strength, Mpa	8	8
Shrinkage % @ 400 °C, 24 h	0.25	-
Compression Strength, Mpa	10	8
Fire Rating for 10 mm thick board, Minutes	240	120
Building material class	A1, Non-Combustible	A1, Non-Combustible
Sizes, mm	2450 x 1220	2500 x 1220
Thicknesses, mm	4 – 30	4 – 30
Thickness Tolerances, for < 12 mm	+/- 0.7	+/- 0.7
Water content, %	< 10	< 10
Moisture Movement	< 0.25	< 0.25

HDRW 850 | High Density Mineral Wool Boards

Wedge HDRW 850 are Refractory Insulation Boards are made of high quality refractory grade mineral fibers mineral wool bonded with high temperature clays. These insulation boards possess unique combination of properties for various industrial applications in furnace backup insulation, fire rated doors, fire protection & heat shield, high temperature gasketing & seals.

- Strong Rigid Boards with high compressive strength.
- High temperature resistance upto 850 °C.
- Very low Thermal Conductivity at high temperatures.
- High Electrical Resistance at high temperature.
- High fire resistance and heat shield properties.
- Easy to cut, laminate, and punch.
- Adaptable by wet moulding for pipe insulation.

Applications:

- Fire Resistant Wooden Doors Manufacturing
- Fire Resistant Steel Doors Making
- Fire Resistant Lift Doors Manufacturing
- Heat Shield / Thermal Protection
- Fire Protection Systems
- Fire Resistant Partitions
- Electrical & home appliances insulation gaskets



Technical Properties	HDRW 850	
Colour	Light Brown	
Classification Temperature, °C	850	
Density, Kg/M3	950	
Thermal conductivity, W/m.K		
	400 °C	0.10
	600 °C	0.11
	800 °C	0.12
Fire Resistance for 10 mm thickness, minutes	120	
Fire Resistance for 5 mm thickness, minutes	60	
Tensile Strength, Mpa	3.5	
Shrinkage % @ 1000 °C	2	
Compression @ 70 Kg/cm2	15	



WRRB | Rigid Mineral Wool Insulation Boards

Wedge RRB are Rigid Mineral Wool boards made of pure stone wool bonded with high quality thermosetting resin binders. These Mineral Wool boards are multifunction boards non-asbestos, non-combustible type having extremely high melting temperature. It do not produce toxic smoke in the event of a fire and are an excellent barrier against the spread of flames to help protect occupants and reduce property damage. We offer wide range of densities from 48 – 160 Kg/M3.

Features & Advantages:

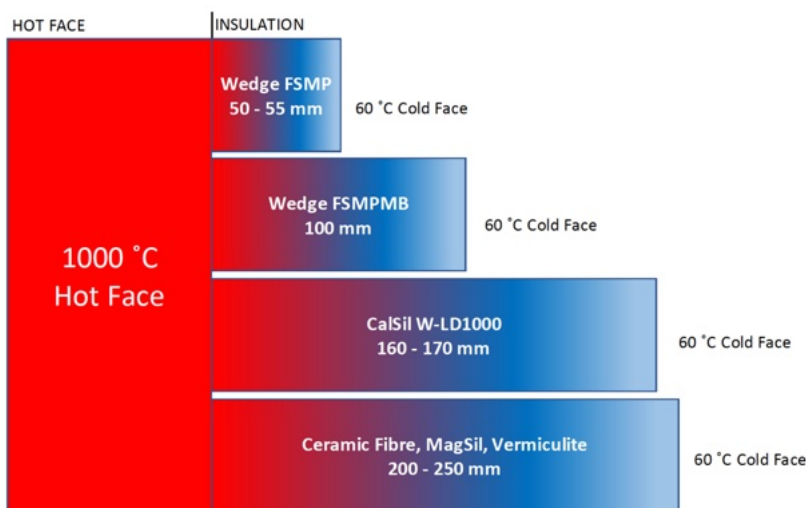
- Very high acoustic / sound insulation performance.
- High Thermal Integrity.
- It will not slump, shrink, expand
- Excellent moisture control.
- Water proof / water repellent option available
- Non-combustible & High fire resistance
- Cost-efficient insulating effect
- Stable and jolt-proof
- High permanent temperature resistance
- Low thermal conductivity
- Low organic binder content
- Rot-resistant and non-ageing
- Chemically neutral
- Water-repellent
- Easy to machine



Applications:

- Production of Sandwich Panels
- Fire Doors Manufacturing
- Fireproof of power plant, oil deport.
- Exterior or interior thermal & acoustical insulation.
- External wall, roofing, partition, curtain wall, etc
- Fire Resistant Doors, Lifts, Safes, Cupboards.

Mineral Wool Boards	Density, Kg/M3	Temperature, °C	Thickness, mm	Thermal conductivity 40 °C, W/m K
WRRB 48	48	750	50 - 200	0.039
WRRB 64	64	750	40 - 150	0.038
WRRB 80	80	750	25 - 150	0.038
WRRB 100	100	750	25 - 100	0.038
WRRB 128	128	750	25 - 100	0.038
WRRB 144	144	750	25 - 100	0.038
WRRB 160	160	750	25 - 75	0.038
WRRB 900	900	1000	1 - 25	0.08



Wedge Insulation Products - Most Effective Low Cost Insulation System

Wedge AISi1260 | Fire Resistant Aluminium Silicate Sheet

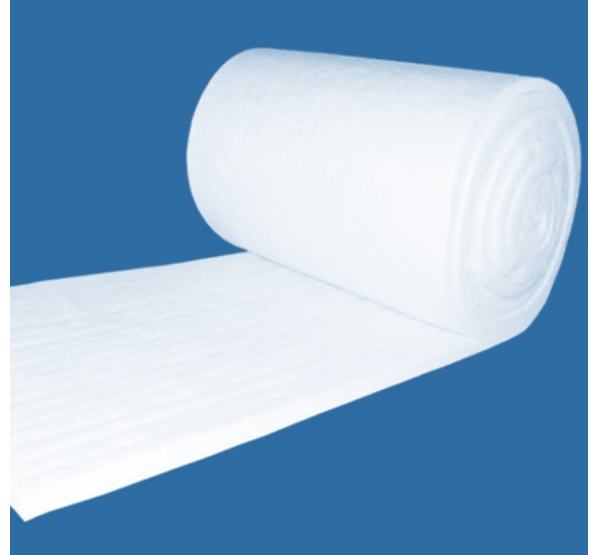
Wedge AISi1260 is Aluminium Silicate sheets are most useful infill materials for increasing fire resistance of Fire Doors. These sheets are made of high temperature resistant special types of ceramic fibres with high R-Value and low thermal conductivity. These aluminium silicate ceramic fibres are produced by the most modern spinning needling and thermal forming processes. These insulation materials are available in shape of mattress and semi rigid boards and are thermally efficient high temperature insulating materials that combine the advantages of both low heat storage and complete resistance to thermal shock. These Insulation materials have extremely high resistance against fire.

Features & Benefits

- High thermal shock resistance
- Heat resistance, High fire resistance
- Suitable for making Fire Doors & Fire walls
- Low thermal conductivity
- Excellent chemical stability
- Low shot content
- Low heat storage
- High tensile strength

Applications

- Industrial furnace lining
- Fire Wrap & infill materials in Fire Doors
- Fire resistant wall & partitions making
- High temperature pipes heat preserve
- Heat resistant sealing gasket
- Glass tank furnace thermal insulation
- Power boiler and nuclear heat insulation
- Ceramics kilns thermal insulation
- High temperature filter materials



Item	AISi96 1260			AISi98 1260			1430 ASZ Blanket			
Chemical Composition (%)										
Al ₂ O ₃	44			≥45			≥34			
Al ₂ O ₃ +SiO ₂	≥96			≥98			≥85			
ZrO ₂	-			-			≥15			
Al ₂ O ₃ +SiO ₂ +ZrO ₂	-			-			≥99			
Fe ₂ O ₃ +RTiO ₂	1.0			≤0.5			≤0.5			
K ₂ O+Na ₂ O	1.0			≤0.2			≤0.2			
Density (Kg/M ³)	80	96	128	96	128	160	96	128	160	
Classification Temperature (°C)	1260			1260			1430			
Shot Content(%)	≤15			≤15			≤12			
Fiber Diameter (um)	3.5			3.5			3.5			
Permanent Heating Linear Change %				1100°CX24h≤-2.5			1350°CX24h≤-2.5			
Thermal Conductivity (W/m.k)										
	400°C	0.100	0.090	0.095	0.124	0.114	0.101	0.138	0.122	0.118
	500°C	0.122	0.119	0.123	0.145	0.135	0.120	0.179	0.153	0.145
	600°C	0.155	0.152	0.158	0.202	0.191	0.175	0.220	0.184	0.172
Tensile Strength (Mpa)	0.040	0.040	0.050	0.050	0.060	0.075	0.050	0.060	0.075	
Specifications (mm)	Length X Width: 14400/7200/3600X1220/610;Thickness: 6~60mm									
Packing	Plastic bag inside, carton box outside or with pallet or woven bags Can be customized by specific requirement.									
Quality Certificate	ISO9001-2008 ISO14001-2004									

WegdeMAG | High Strength Magnesium Sulphate MgO Board

WegdeMAG MgO board is mainly made of magnesium oxide, magnesium sulphate or magnesium chloride, perlite and wood fiber. It is a material which neither burns nor gives off flammable vapours in sufficient quantity for self-ignition when heated to approximately 800°C. It does not spread flames or smoke.

Features & Benefits

- Without chloride elements
- Solve the problems of light corrosion and expansion
- Fireproof, waterproof, shockproof, tasteless, non-toxic
- Does not rot, does not crack, deformable
- Non-combustible, high strength, light weight,
- Convenient construction, long service life

Applications

- Fire Door Manufacturing
- Internal Wall, Partition & Ceiling
- The Decorative applications
- The Sub-roof board
- The Underlay board for Floor and Wall tile



Technical Properties

Item Details & Test Standards	WedgeMAG
Base Materials	MgO, MgSO ₄ , Perlite
Thickness, mm	4 - 20
Standard Size, mm	2440 x 1220
Short term Temperature Resistance °C	1400
Long term Temperature Resistance °C	1200
Resistance to freezing °C	- 20
Density, kg/m ³ , BS EN 12467 -2012, ASTM C 1186, minimum	1050
Fire Rating, Minutes	240
Reaction to fire, Non Combustibility BS 476 Part4, EN13501-1	A1
Acoustic Sound Insulation, DB	43
Impact Shock Resistance ASTM D5328, kJ/m ²	6
Compressive strength, Mpa	18
Bending strength dry, ASTM C 1185/ISO 8335, Mpa, EN12467:2012 +A1:2016	16
Bending strength wet, Mpa	13
Screw Pull out Strength, N	1480
Direct Screw Withdrawal, ASTM D1037-12, N	1000
Moisture content %	6.50 to 8.9
Frost resistance Freeze Thaw cycles, EN12467:2012+A1:2016	50
Moisture movement, ASTM C1185, EN12467:2012 +A1:2016 %	0.18
Water absorption, ASTM C1185, %	10
Water permeability after 24 hours, water gauge 5 cm	Lack of leakage
Water Impermeability, EN12467:2012+A1:2016	Passed
Dry Shrinkage, ASTM C 1186-08, maximum %	0.2
Wet expansion ASTM C 1186-08, maximum %	0.1
Thermal conductivity, ASTM C177, EN12667:2001, W/(m·K)	0.186
Thermal Resistance, EN12667:2001, (m ² ·K)/W	0.065
Asbestos or formaldehyde	None
Warranty, Years	50
Free chloride content, %	None
Growth of Mold & Mildew ASTM D3273	No Growth
MgO %	50 to 60
MgSO ₄	25 to 30
MgCl ₂	None
Dimensional Tolerance, EN12467:2012 +A1:2016, Width	±2mm
Dimensional Tolerance, EN12467:2012 +A1:2016, Thickness	±0.2mm
Dimensional Tolerance, EN12467:2012 +A1:2016, Edge Straightness, %	±0.02mm
Dimensional Tolerance, EN12467:2012 +A1:2016, Squareness, mm/m	±0.08mm

INTUR | Rigid Intumescent Fire Seal Strips

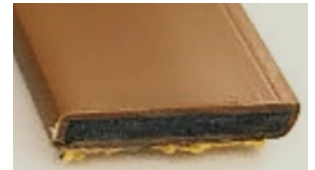
Rigid types of Intumescent fire seals are most suitable for severe application where regular door maintenance is not possible. The PVC covering to the graphite intumescent seal protects from wearing out due to any mechanical damage to the seals.

At wedge we produce and supply different versions including fire only, fire & smoke, fire & acoustic, and fire & weather proof seals of Rigid Fire Seals depending on the end user requirements.

In the event of a fire the INTUR intumescent graphite seal expands multiple times its original volume and seals the gap around the door edges and joints to provide fire barrier and stop the passage of fire, smoke and hot gases. Surface Mounted Acoustic & Smoke Door Bottom Seals or Rebate Fit Acoustic & Smoke Door Bottom Seals are most suitable for the door bottom sealing. All fire and smoke seals are supplied with a self-adhesive backing tape as standard to facilitate quick and easy fitting. All the seals are Tested for 30 minutes, 60 Minutes, and 120 Minutes to BS 476 part 22 & 31.1. Smoke seals tested to EN1634-3 to 100,000 open/close cycles.

Fire Protection Only

- Applied in the Fire Door assemblies where no threat of Smoke
- Available in 2.1 meter and 1.05 meter lengths
- Self adhesive type
- Fire rating from 30 to 120 minutes
- Thickness 4 mm and width 10 mm to 25 mm



Fire & Smoke Protection with Brush

- Protects against damages from Fire & Smoke
- Available in 2.1 meter and 1.05 meter lengths
- Self adhesive type
- Fire rating from 30 to 120 minutes
- Thickness 4 mm and width 10 mm to 25 mm



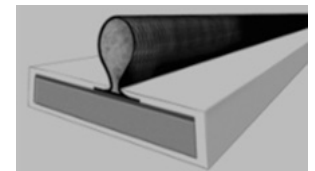
Fire & Smoke Protection with Neoprene single / twin blade

- Protects against damages from Fire & Smoke
- Available in 2.1 meter and 1.05 meter lengths
- Self adhesive type
- Fire rating from 30 to 120 minutes
- Thickness 4 mm and width 10 mm to 25 mm



Fire, Smoke, Acoustics, and Weather Protection

- The complete protection from fire, smoke, noise, heat, and water
- Available in 2.1 meter and 1.05 meter lengths
- Self adhesive type
- Fire rating from 30 to 120 minutes
- Thickness 4 mm and width 10 mm to 25 mm



Technical Properties:

Base Materials		: Intumescent Graphite
Covering Material		: PVC in colours as desired
Type		: Rigid with Self Adhesive
Colours		: Brown, Red, Black, White, Grey
Length	meter	: 2.1, 1.05
Width	mm	: 10, 15, 20, 25
Thicknesses	mm	: 4
Activation Temperature	°C	: 180 to 200
Fire Ratings	Minutes	: 30, 60, 90, 120

INTUF | Flexible Intumescent Fire Seal Strips & Sheet

INTUF is a rubber free zero halogen intumescent fire seal that in case of fire expands 20 to 60 times without generating any harmful or toxic gases. These are high performance and high expansion Intumescent fire seals without any PVC coverings.

These strips are most suitable for applications in wooden fire doors, manufacturing PVC covered rigid intumescent strips, glazing seals, manufacturing intumescent hinge pad seals, door hardware and ironmongery protection, damper seals, gap sealing or a variety of gasketing applications.

INTUF is highly flexible allowing it to be wrapped or folded to suit various applications but produces an excellent char structure helping to maintain integrity throughout the fire.

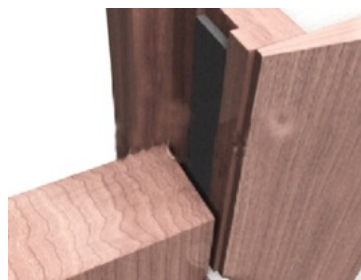
Features and Benefits

- Zero halogen intumescent fire seals
- Rubber free and do not generate any toxic smoke
- Generates high expansion when exposed to fire or heat
- Produces an excellent char structure to provide high integrity
- Available in strips 2.1 meter and 1.05 meter lengths
- For bulk use available Sheets 2100 x 1000 mm size
- Self adhesive type
- Fire rating from 30 to 120 minutes
- Thickness from 0.5 mm to 2.5 mm
- 30 years guarantee life



Technical Properties:

Base Materials		: Zero Halogen & Rubber free Intumescent Graphite Laminate
Covering Material		: Without covering or PVC in colours as desired
Type		: With or without Self Adhesive
Colours		: Dark Grey
Length	meter	: 2.1 & 1
Width	mm	: 10, 15, 20, 25, 30, 40, 50, 60, 80, 100, 500
Thicknesses	mm	: 0.5, 1, 1.3, 1.8, 2, 2.1, 2.5
Density	Kg/m ³	: 750 to 800
Activation Temperature	°C	: 180 to 200
Free Expansion Ratio	@ 400 °C	: 20 / 1
Fire Ratings	Minutes	: 30, 60, 90, 120
Guarantee Life	Years	: 30



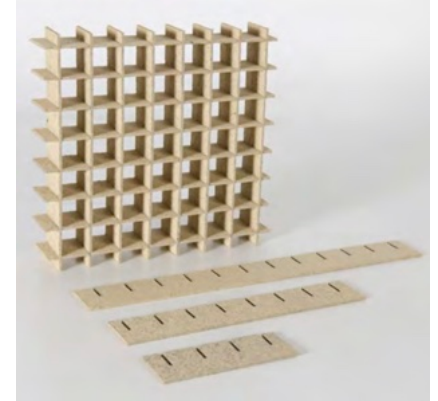
INTUF: Technical Data Sheet

Quality	INTUF 10	INTUF 14	INTUF 20
Reaction to fire	B1, slowly combustible	B1, Difficult to ignite	A1, No contribution to fire
Thickness, mm	1.8, 2, 2.5	1.8, 2, 2.5	1, 1.8, 2, 2.5
Colour	Black	Anthracite Grey	Dark Grey
Texture	Smooth flexible	Solid flexible	Highly flexible
Density, Kg/m ³	1267	850	750
Expansion temperature app. °C	150	150	100
Activation Temperature, °C	280	250	200
Expansion Ratio, min	10 : 1	14 : 1	20 : 1
Expansion pressure, N/mm ²	0.6	0.8	1.2
Adhesive	Self-adhesive	Self-adhesive	Self-adhesive
Thermal conductivity W/(mK)	0.21	0.19	0.14
Smoke during fire	Medium Smoke	Low Smoke	No Smoke
Life, years	12	15	30
Strip Length, mm	1000 - 2500	1000 - 2500	1000 - 2500
Strip Width, mm	10, 15, 20, 25, 30, 40	10, 15, 20, 25, 30, 40	10, 15, 20, 25, 30, 40
Char structure	Low	Medium	High
Picture			

INTUF102B: Air Transfer Fire Grilles

INTUF102B is a rigid intumescent material that possesses good pressure generation and mid-range free expansion performance. INTUF102B is most commonly used as the intumescent core within air transfer grilles to maintain fire compartmentation in timber fire doors.

INTUF102B is available with or without self adhesive backing or PVC coating. It can be supplied in sheets with maximum dimensions of 2150 x 1050 mm, or alternatively it can be slit to a variety of widths and lengths within those dimensions or slotted to build up into an air grille matrix.



Applications of INTUF102B

- Air Transfer Fire Grilles
- Door and Glazing Applications
- Ironmongery Protection
- General Gap Sealing
- Extremely stable char structure

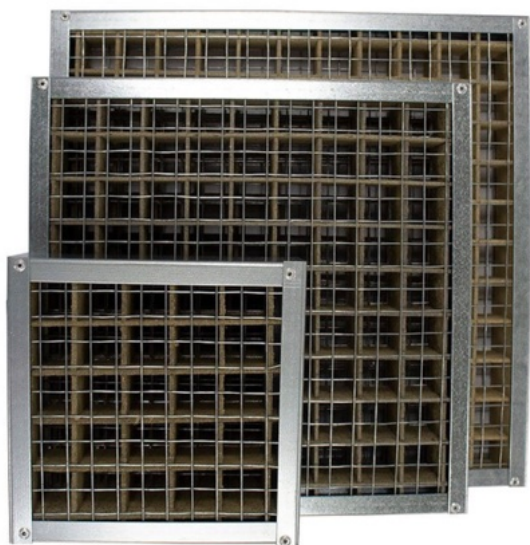
Standard Dimensions

Length (mm)	: 2150
Width (mm)	: 1050
Thickness (mm)	: 2.3
Self-adhesive SA (mm)	: 2.6
PVC coating SA (mm)	: 2.9

Technical Specifications

Density kg/m ³	: 900
Tensile Strength MPa	: 3
Free Expansion Ratio	: 17:1
Activation Temperature °C	: 180
Max. Pressure Generation Bar	: 14.0
Typical Working Life years	: 60

Third Party Approval (AbZ) Zulassungsnr Z-19. 11-1033



Wedge India

120/143, Silverokas Tower
Faridabad Gurgaon Road
DLF City Phase 1
Gurugram, Haryana - 122002,
New Delhi Region, India
Mobile: +91 9717506848
Tel: +91 124-4089664