

Promat

by etex



**Fire safety
made easy**

PROMATECT®-100X



Discover the new way to build fire safe compartmentation with Promat



PROMATECT®-100X is an innovative high performing fire protective board, specifically designed for the fire compartmentation in buildings, such as partitions and ceilings, when high fire protection performance is required.

PROMATECT®-100X is a non-combustible product (A1), made of sulphates and calcium silicate PROMAXON®, based on PromaX® exclusive technology, for fire rated suspended ceilings, ceiling membranes, solid walls, metal and timber

stud walls. Moreover, the board is tested to upgrade the fire resistance of existing constructions.

PROMATECT®-100X has an intended life time of at least 25 years for internal and semi-exposed application foreseen by the EU regulation and is extremely easy to maintain and repair.

Mechanical stability, long durability, easy to cut and snap, low weight and excellent fire behaviour are the main characteristics of PROMATECT®-100X.



Save time

- Build entire compartmentation elements in one or two layers to get the job done quicker with less manpower
- Cover all applications with only 2 board thicknesses – 12 mm and 20 mm
- Less boards means you need less inventory and less transport

MAXIMUM
EFFICIENCY









CUT & SNAP

Make your life easier

- You can easily cut and snap the boards with a mere cutter
- Build ceilings and partitions with standard tools and studs
- The boards have a smooth surface for a great finish with standard joint fillers and paints
- PROMATECT®-100X can be used in semi-exposed applications (Y-class)

Feel and be safe

- Non-combustible material (A1 according to Euroclass) for ultimate fire safety
- Use high quality fire protection boards from the world leader in fire safety
- PROMATECT®-100X comes with CE marking for intended use “fire protective board” and at least 25 years of durability

A1 FIRE
REACTION
CLASS

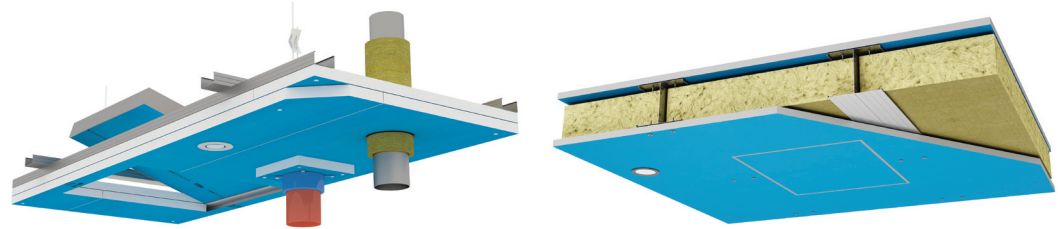




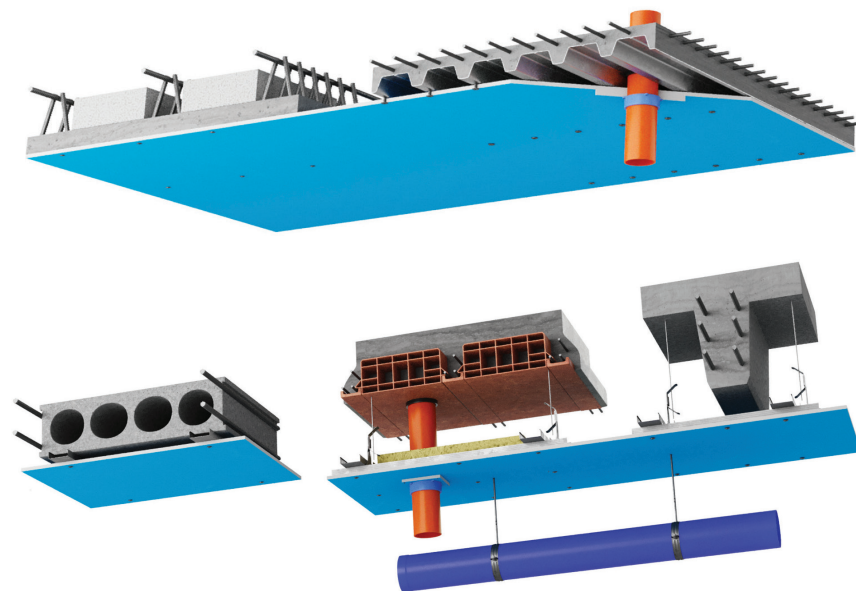
Horizontal compartmentation

Summary of the solutions for horizontal compartmentation elements using PROMATECT®-100X boards, with direct and extended field of application according to EN 1365-2 (load-bearing ceiling) and EN 1364-2 (non load-bearing, self-supporting ceiling or ceiling membrane).

CEILING MEMBRANES (EN 1364-2)			
System	Fire Performance	Description	Details
Suspended ceiling	EI 90 (a←b)	20mm + 12mm on double metal frame	Tested with penetrations, inspection hatches, integrated spotlights
Suspended ceiling	EI 120 (a←b)	2 x 20mm on double metal frame	
Self-supporting ceiling	EI 90 (a←b)	2 x 12 mm on C75 metal frame, with 60 mm stone wool	
Self-supporting ceiling	EI 120 (a←b)	2 x 12 mm on C100 metal frame, with 2 x 40 mm stone wool	

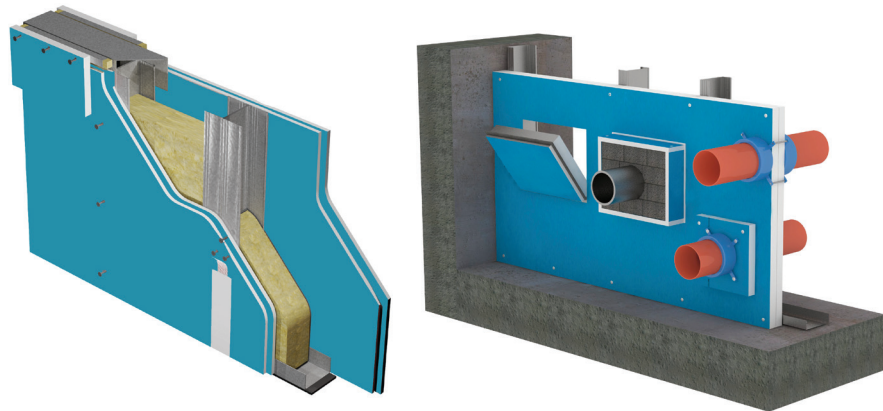


CEILING UPGRADES (EN 1365-2)			
System	Fire Performance	Description	Details
Upgrade of concrete-masonry floor (pre-stressed concrete joists)	REI 90	12 mm, suspended, with glass wool	Tested with penetrations and inspection hatches
Upgrade of concrete-masonry floor (standard concrete joists)	REI 120	12 mm, suspended	
Upgrade of predalles type floor	REI 120	12 mm, direct fixing with metal expansion bolts	–
Upgrade of steel and concrete deck	REI 120	12 mm, semi-adherence on steel channels	–
Upgrade of lightweight concrete slab and steel beams	REI 90	20 mm, suspended	Tested with penetrations and inspection hatches
Timber floor protection	REI 60	12 mm, direct fixing	–



Vertical compartmentation

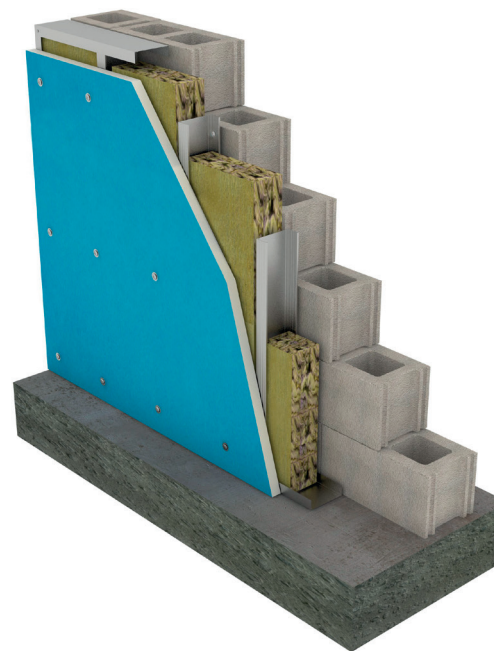
Summary of the solutions for vertical compartmentation elements using PROMATECT®-100X boards, with direct and extended field of application according to EN 1364-1 (non load-bearing walls).



PARTITIONS AND SHAFT WALLS (EN 1364-1)			
System	Fire Performance	Description	Details
Sandwich partition (max. 3 m height)	EI 90	12 mm (each side) on 48 mm metal structure, with mineral wool	–
Sandwich partition (max. 4 m height)	EI 90	12 mm (each side) on 100 mm metal structure, with mineral wool	–
Sandwich partition	EI 120	20 mm (each side) on 48 mm metal structure, with mineral wool	–
Sandwich partition (up to 9 m height)	EI 120	2 x 12 mm (each side) on 100 mm metal structure, with glass wool	–
Sandwich partition (up to 11 m height)	EI 120	2 x 12 mm (each side) on 150 mm metal structure, with glass wool	EXAP EN 15254-3
Sandwich partition (up to 12 m height)	EI 120	3 x 12 mm (each side) on 150 mm metal structure, with glass wool	EXAP EN 15254-3
Shaft wall	EI 60	2 x 12 mm on 75 mm metal structure	Fire from both sides, tested with penetrations and inspection hatches
Shaft wall	EI 120	2 x 20 mm on 50 mm metal structure	Fire from both sides, tested with penetrations and inspection hatches
Shaft wall	EI 180	3 x 20 mm on 50 mm metal structure	Fire from metal frame side, tested with penetrations and inspection hatches

WALL UPGRADES (EN 1364-1)

System	Fire Performance	Description	Details
Upgrade of clay hollow bricks (boards on the exposed side)	EI 120	12 mm, fixed with gypsum-based glue and metal anchors	Tested with electrical appliances
Upgrade of clay hollow bricks (boards on the unexposed side)	EI 120	12 mm, fixed with metal anchors	Tested with electrical appliances
Upgrade of concrete hollow bricks (boards on the exposed side)	EI 180	12 mm on 50 mm metal structure, with mineral wool	–
Upgrade of standard plasterboard partition	EI 120	12 mm (on each side), screwed	Tested with electrical appliances



Product technical specifications

PROMATECT®-100X

Dimensions and tolerances

Dimensions:

- thicknesses:
12 mm and 20 mm
- width x length:
1200 x 2000 mm / 1200 x 2500 mm.

Board tolerances:

- thickness:
0 / +1 (12 mm); 0 / +2 (20 mm)
- length and width: -5 / 0 mm
- squareness: 2.5 mm/m

Compliance authority

The board is CE marked according to ETA based on EAD-350142-00-1106 (Fire Protective Products, Fire Protective Board) for the following usage categories: **Z2 – internal use, Y – external use semi-exposed.**

Physical properties

Density (EN 12467):

840 kg/m³ ±10%

Perpendicular tensile strength (EN 319):

0.91 Mpa for the 12 mm boards
0.97 Mpa for the 20 mm boards

Parallel tensile strength (EN 789):

Longitudinal: > 1.6 MPa
Transversal: > 1.4 MPa

Compressive strength (EN 789):

Longitudinal: > 6 MPa
Transversal: > 6 MPa

Longitudinal bending strength (EN 12467:2016 – conditioning at 105°C):

> 4.5 MPa
Bending flexural strength (EN 12467:2016 – conditioning at 105°C): > 2.5 MPa

Modulus of elasticity

(EN 12467:2016 – conditioning at 40°C):

Longitudinal: > 2000 MPa (12 mm)
Transversal: > 2000 MPa (12 mm)

Fire reaction classification (EN 13501-1):

A1

Freeze-thaw (EN12467):

passed

Intended use:

Y and Z2

Dimensional stability (EN 318):

Length:

65%RH 20°C to 85%RH 20°C:

Longitudinal 0.3 mm/m
Transversal 0.3 mm/m

65%RH 20°C to 30%RH 20°C:

Longitudinal -0.1 mm/m
Transversal -0.1 mm/m

Thickness:

65%RH 20°C to 85%RH 20°C:

Longitudinal 0.2 %
Transversal 0.0 %

65%RH 20°C to 30%RH 20°C:

Longitudinal -0.1 %
Transversal -0.1 %

Thermal conductivity (λ):

0.25 W/mK

Water vapour diffusion resistance factor (μ) (EN ISO 12572):

11–14

Appearance

PROMATECT®-100X comes with a blue smooth surface finish on both front and back sides. The board has square or tapered edges on its longitudinal sides and square edges on its transversal sides.

General processing instructions, handling

Storage

Store on flat surface, in a dry area.

Handling

The boards are delivered on pallets.

The boards shall be horizontally stacked on a flat surface in a dry and ventilated space.

The boards shall always be manipulated from the stack by two persons and then be transported vertically.

Health & Safety

Always ask for the PROMATECT®-100X material and safety datasheet.

Application

Fire resistant walls and ceilings for fire compartmentation in buildings.

Surface Finish

Etex Building Performance supplies its compounds under the Siniat brand range.

Our Centre for Research and Development of Avignon (ITC) has developed highly qualified compounds delivering the best surface adhesion and workability, together with fire resistance for PROMATECT®-100X.

	Promat® Filler PRO	Promat® Ready Mix PRO
		
Type	Powder	Ready-to-use
Reaction to fire	A1	A2-s1; d0
Proportion water/powder	11 litres of water for 20 kg	–
Packaging	20kg bag	10kg or 20kg bucket