



Thermo Board™

Description :

ThermoBoard™ is a Magnesium Oxide (MgO) and Magnesium Chloride based construction board that out performs cement based boards, calcium silicate boards and regular gypsum plasterboard. Some of the excellent feature of ThermoBoard™ is that it is a fire proof board + Water resistance + Termite resistance and mold and mildew resistance.

ThermoBoard™ does not contain any organic solvents, formaldehyde, asbestos, oils or other toxic substances that can have a negative impact on the environment and waterways.

Where the ThermoBoard™ excels is through its unrivalled all round performance characteristics. On a 80 mm metal stud partition system with 75mm thick insulation, a single 10mm Thermo Board™ on either side of the metal stud, giving an overall partition thickness of 100 mm, will provide up to 3 hours fire resistance and 46 Rw dB. Achieving similar performance with a single stud and gypsum plasterboard partition system is unknown where fire rating is concerned, where at best only 2hrs can be achieved. As for the acoustics, this can be achieved but not without increasing the overall wall thickness and increasing the number of plasterboard layers either side. Both of which will result in either a loss of premium floor space for the client and increased labor costs for the insulation contractor.



| Dimension in cm | Thickness in mm | Weight kg/m ² |
|-----------------|-----------------|--------------------------|
| 122 x 244 | 6 | 7 |
| 122 x 244 | 9 | 9.8 |
| 122 x 244 | 12 | 12.8 |
| 122 x 244 | 15 | 15.3 |
| 122 x 244 | 18 | 19.8 |



Technical Specification of ThermoBoard™

| Sr.No | Description of Properties | ThermoBoard™ | |
|-------|--|---|--------------------------------|
| 1 | Material | Magnesia Cement | |
| 2 | Flexural Strength | 6mm = 13.245MPa , 12 mm = 10.51 Mpa | ASTM C1185-03 |
| 3 | Water absorption | 12 mm >23 % | ASTM C1186-02 |
| 4 | Water Content | > 10 % , | ASTM C1186-02 |
| 5 | Water Resistance | No water drop let formed on the under side | |
| 6 | Density | 0.96 - 1.15 cm ³ | |
| 7 | Thermal Insulation | Can achieve a R value of 3.28 with our Thermo Board system | BS 4370 Part 2 |
| 8 | Impact Resistance | >7 KJ/m ² | ASTM C1325 |
| 9 | Rate of deformation when pick up moisture | 0.26% | |
| 10 | Shrinking rate when heated | 1% | |
| 11 | Sound Insulation(Refer STC manual) | > 50 db (12mm both sides, metal stud construction and bats.) | ASTM E90 |
| 12 | Security | 100 % free of asbestos & Formaldehyde | |
| 13 | Resistance to Growth of Mold and Mildew | ThermoBoard is not a nutrient for mold and mildew | ASTM D-3273 |
| 14 | Nail Head Pull - Through | 12mm = 174.8 lbf (Exceeds requirement) | ASTM C1325-04 |
| 15 | Shear Bond Strength | Portland 168.82 PSI Latex 234.32 PSI | ASTM C1325-04 ASTM C1325-04 |
| 16 | Fireproof characteristic | 6mm = Classification A (non-flammable) 12mm= Classification A (exceeds 1 hr rating) | ASTM E84 ASTM E84 |
| 17 | Dimension deviation | | |
| | Length | Nominal +/- 2mm | |
| | Width | Nominal +/- 2mm | |
| | Thickness | About +/- 0.5mm | |
| 18 | Accelerated Weathering (Outdoor exposure) | The specimens were examined under 5x magnification following 2000 hrs of exposure or chalking were observed | ASTM G 155 |



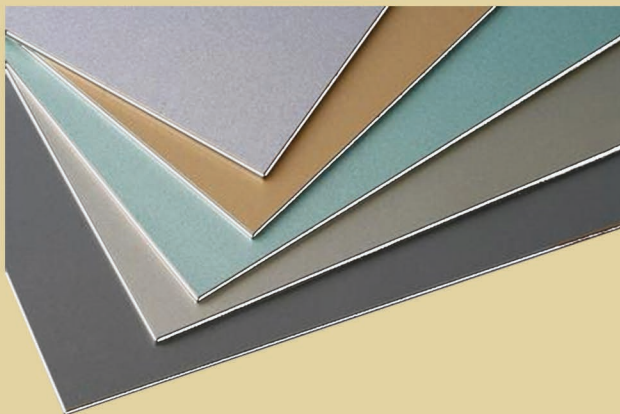
Technical Specification of ThermoBoard™

| Sr.No | Description of Properties | ThermoBoard™ | |
|-------|-------------------------------------|--|-------------|
| 19 | Freeze/ Thaw Accelerated Weathering | ThermoBoard exceeds the requirement No signs of surface cracking, erosion or chalking | ASTM- C1185 |
| 20 | Toxicity | Classified as non-toxic and is asbestos and silica free | |
| 21 | VOC Testing | ThermoBoard contains NO toxic VOC's | ASTM D5116 |
| 22 | Off Gassing | ThermoBoard does not produce off-gassing | |
| 23 | Colour | Slate Grey & Chalk White | |
| 24 | Finish | Smooth one side and Uniform textured back | |

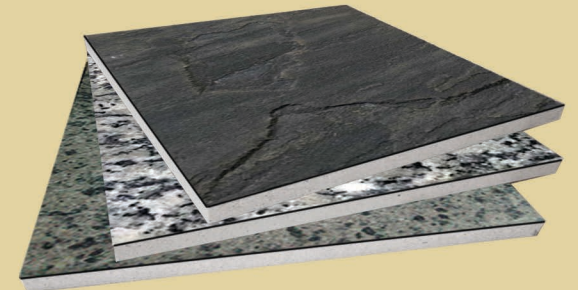
Thermo Board Compressed With Natural
Wooden Veneer Finish (0.5 mm)



Thermo Board Compressed With
Aluminium Cladding (0.5 - 1 mm)



Thermo Board(mgo) Compressed With Natural
Flexible Granite/Sandstone Finish (2 -3 mm)



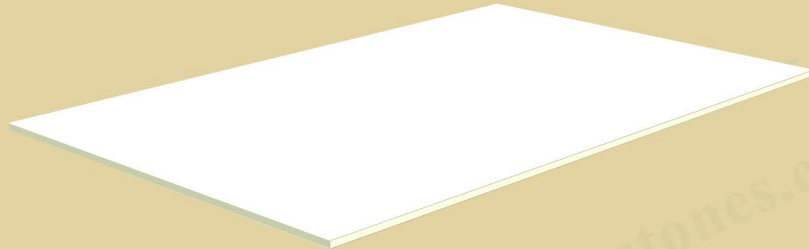


ThermoBoard - TB

Description :

Panel Consisting of Magnesium oxide & other natural earth minerals, which is bound together with 2- 3 layer of Fiber mesh for better re-enforcement and strength.

Use : Exterior & interior fire proof cladding system, elimination of thermal bridges in the pillars, beams, acoustic insulation of walls, insulation from floor noise, insulation of flat and sloping roofs, permanent formwork to concrete, fire resistant coverings.



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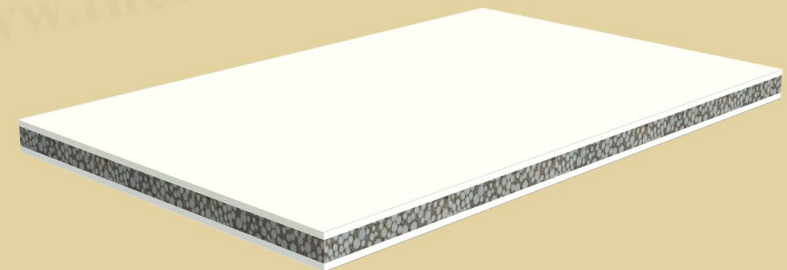
ThermoBoard - TB +TCP+TB

Description :

Sandwich panel consisting of two layers of ThermoBoard™ made of magnesium oxide & natural earth minerals which is combined with ThermoCon Panel™ consisting of foamed magnesia cement & natural earth mineral that is bound together with 6 layer of Fiber mesh for better re-enforcement and strength.

Use : mezzanine flooring , external load bearing walls for villas & low rise buildings, internal partition walls for high rise building, shopping malls, villas, schools and hospitals, acoustic insulation of walls, raised flooring , insulation from floor noise, insulation of flat and sloping roofs, fire resistant door core , low cost housing etc.

| Dimension in cm | Thickness in mm | Weight kg/m ² | Rm ² K/W |
|-----------------|-----------------|--------------------------|---------------------|
| 60 x 240cms | 40mm (5+30+5) | 22.50 | 0.27 |
| 60 x 240cms | 60mm (5+50+5) | 29.50 | 0.45 |
| 120 x 240cms | 50mm (10+30+10) | 32.30 | 0.33 |



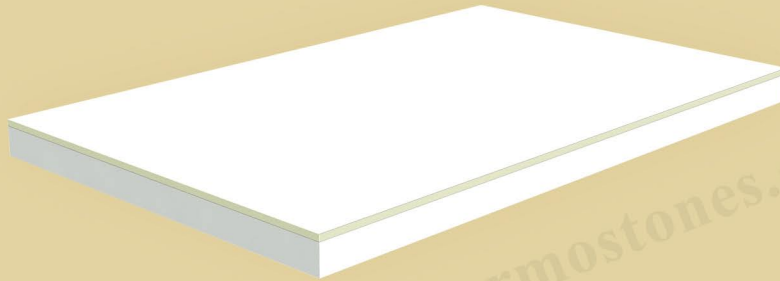


ThermoBoard - TB and EPS Board

Description :

ThermoBoard™ is a magnesium oxide board which is non-combustible and it bound together with Expanded Polystyrene of guaranteed quality .

Use : acoustic insulation of walls, attic thermal insulation ,insulation from floor noise, thermal insulation of flat and sloping roofs, sound absorbing panel & for external cladding system on block works



| Dimension in cm | Thickness in mm | Weight kg/m ² | Rm ² K/W |
|-----------------|-----------------|--------------------------|---------------------|
| 60 x 120 | 5 + 50 | 6.95 | 1.43 |
| 60 x 120 | 10 + 50 | 11.85 | 1.46 |
| 240 x 60 | 5 +100 | 11.85 | 2.86 |
| 120 x 240 | 10 + 50 | 7.90 | 2.83 |

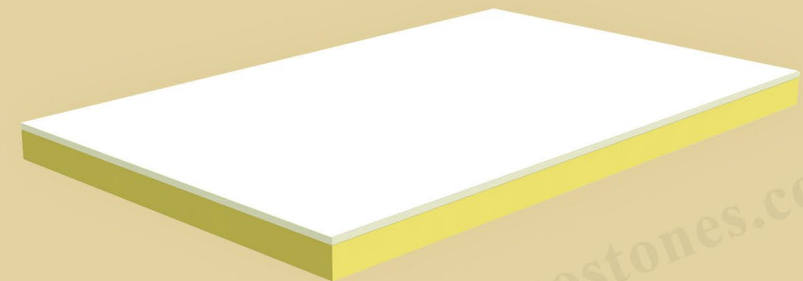
ThermoBoard- TB and Rockwool

Description :

ThermoBoard™ is a magnesium oxide board which is non-combustible and it bound together with Non- Combustible Mineral Wool of guaranteed quality .

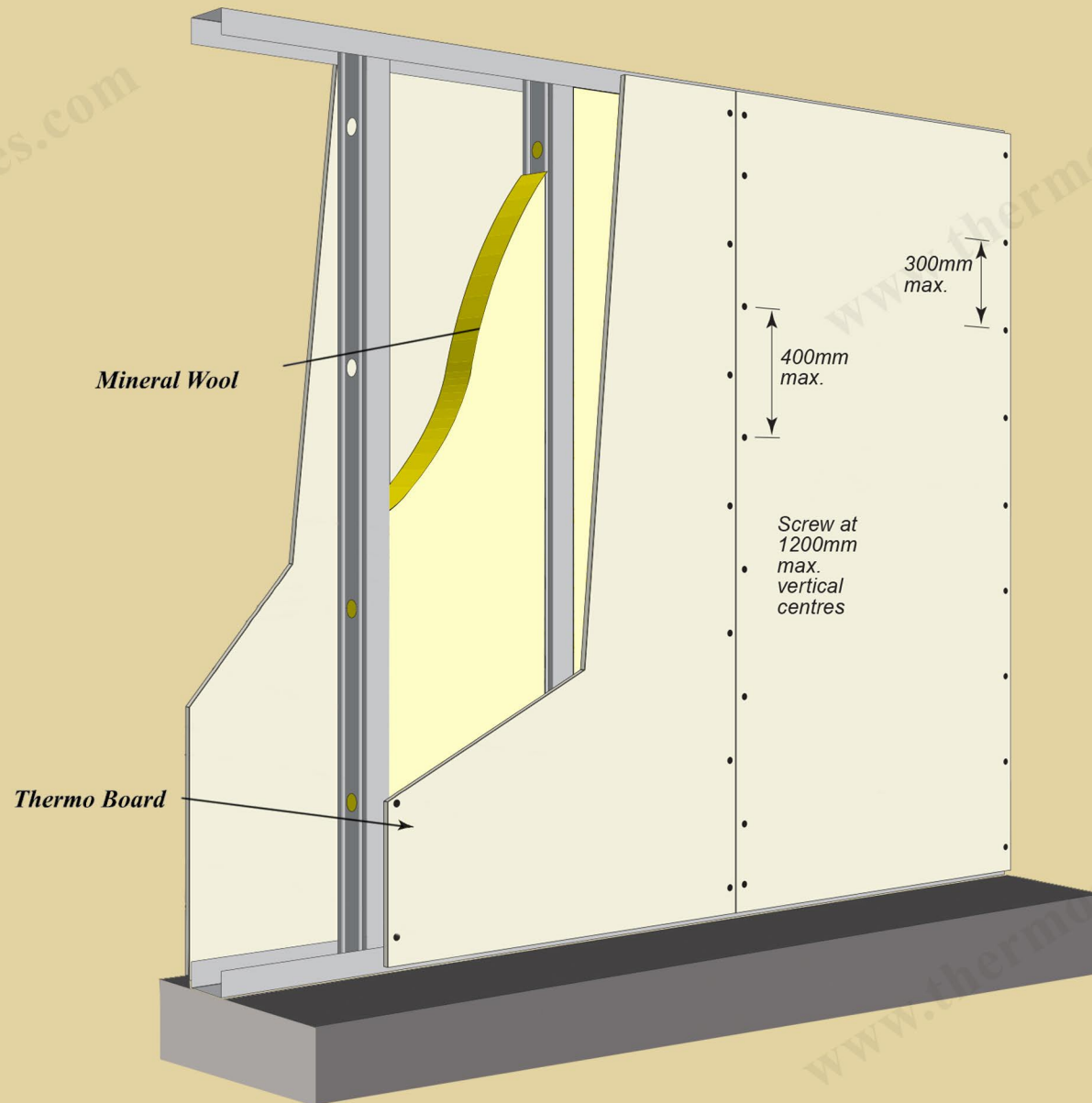
Use : acoustic insulation of walls, attic thermal insulation ,insulation from floor noise, thermal insulation of flat and sloping roofs, sound absorbing panel & for external cladding system on block works

| Dimension in cm | Thickness in mm | Weight kg/m ² | Rm ² K/W |
|-----------------|-----------------|--------------------------|---------------------|
| 60 x 120 | 5+50 | 8.19 | 1.64 |
| 60 x 120 | 10+100 | 15.28 | 3.28 |
| 120 x 240 | 5+50 | 8.19 | 1.64 |



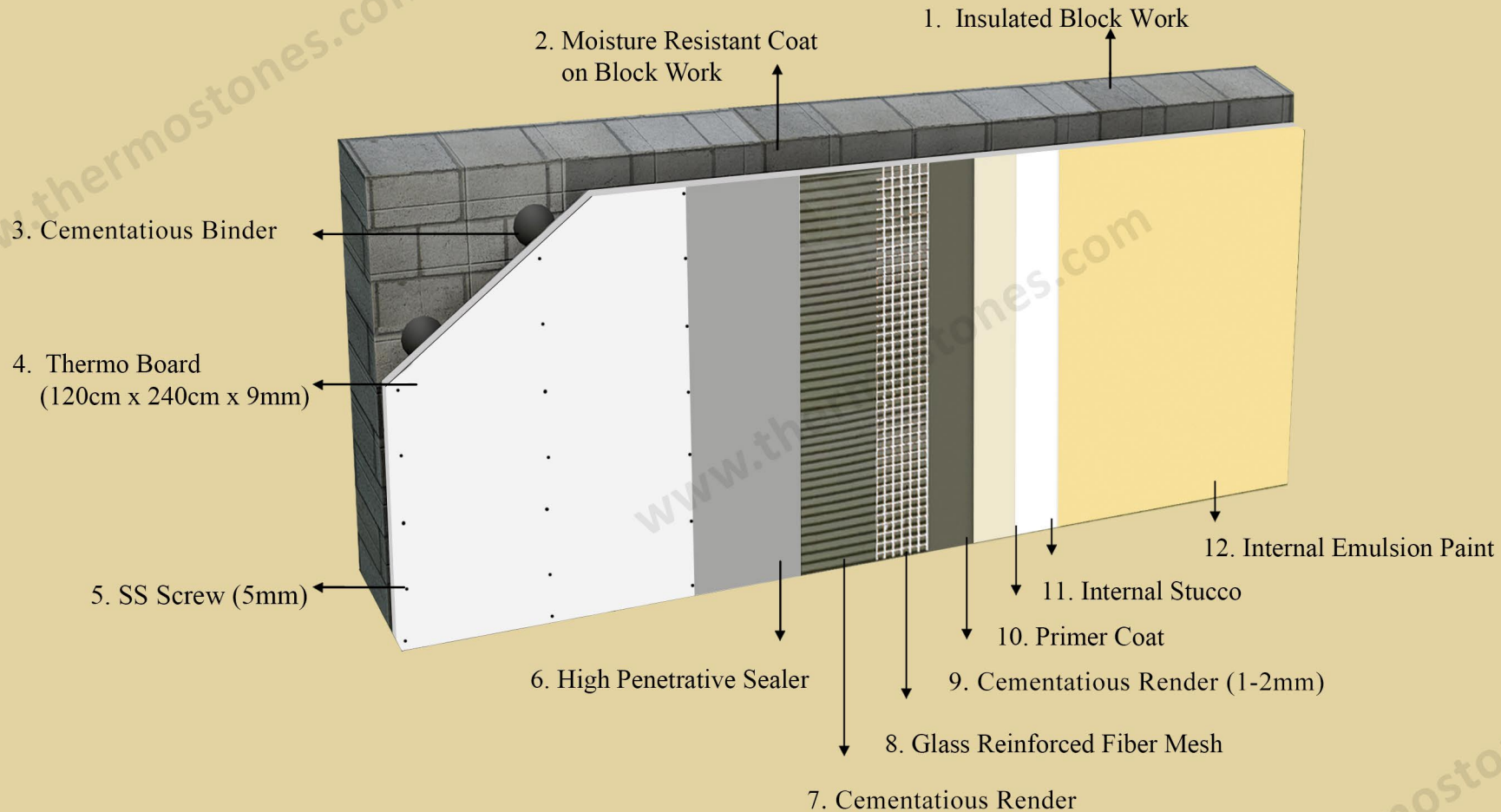


Interior & Exterior Wall Section





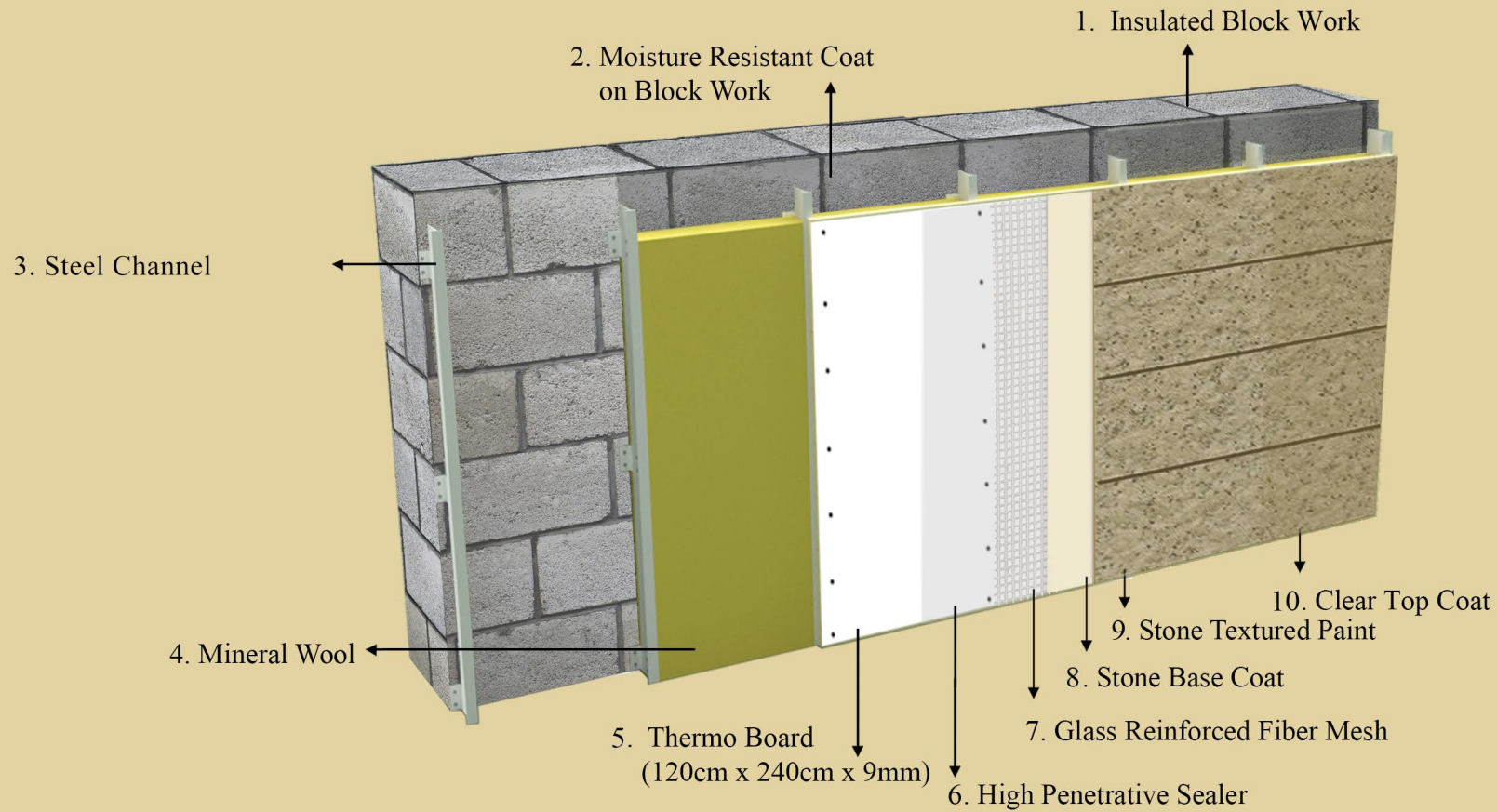
Thermo Board™ On a Insulated Block Work Thermo Board For Interior Walls



System Reference Code: TB-9-EMU



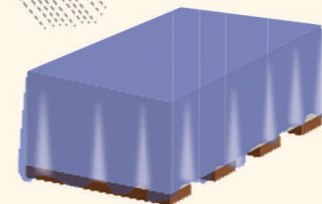
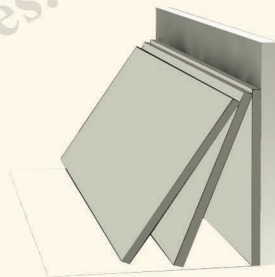
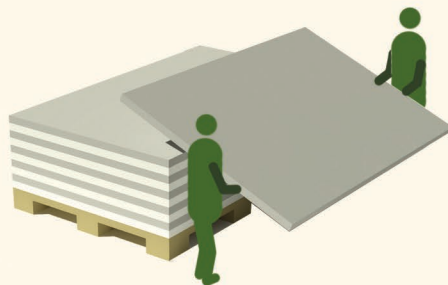
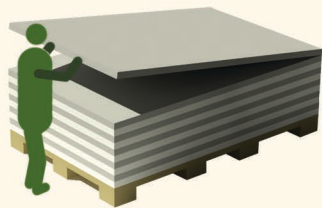
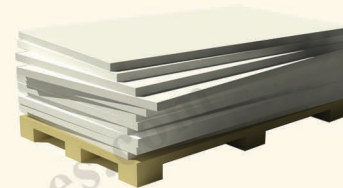
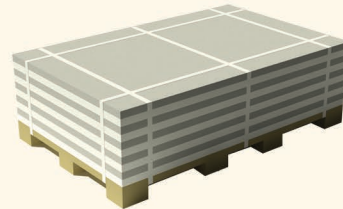
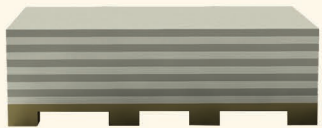
Exterior Wall Section



System Reference Code: TB-9-ST



Do's & Dont's

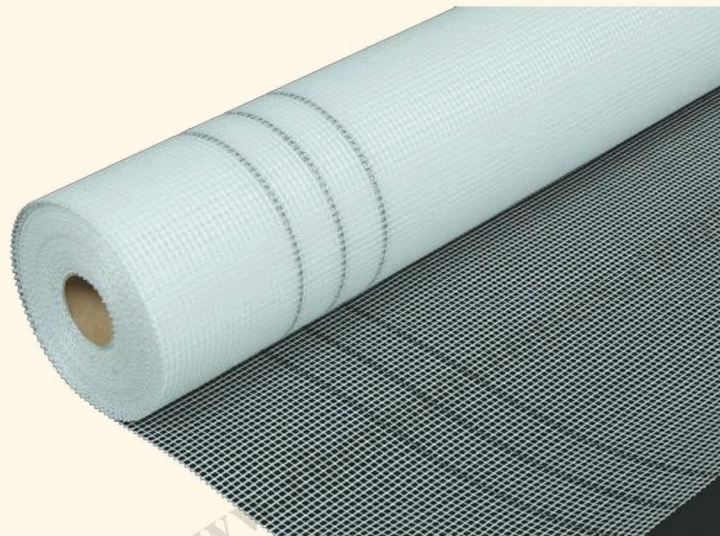
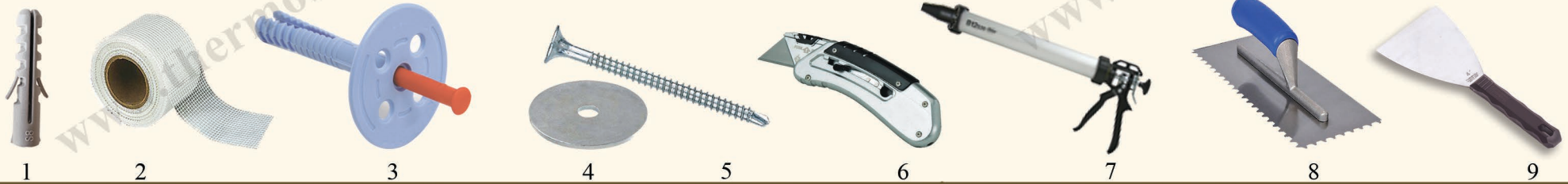




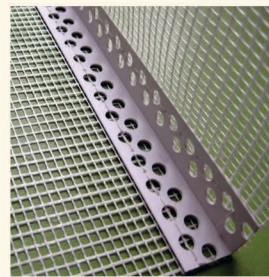
Panel & Board Fixing Accessories

- 1 . Raul Plug
- 2 . Joint Tape
- 3 . Plastic Dowel
- 4 . SS/MS-Washer
- 5 . Self Drilling Screw-SS/MS
- 6 . Heavy Duty Cutting Blade

- 7 . Joint Filler Gun
- 8 . Trowel
- 9 . Scraper
- 10 . Fiber matt
- 11 . Corner bead



10



11



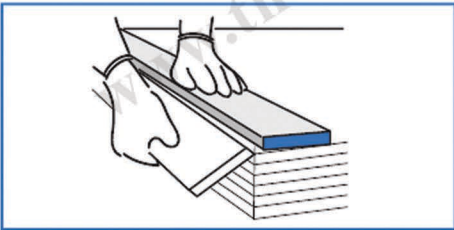
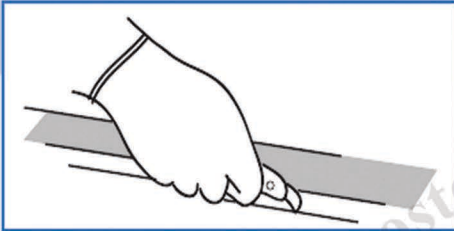
Protect Yourself At Work



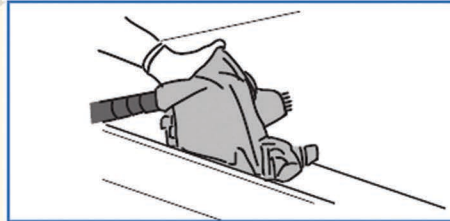


THERMO BOARD™

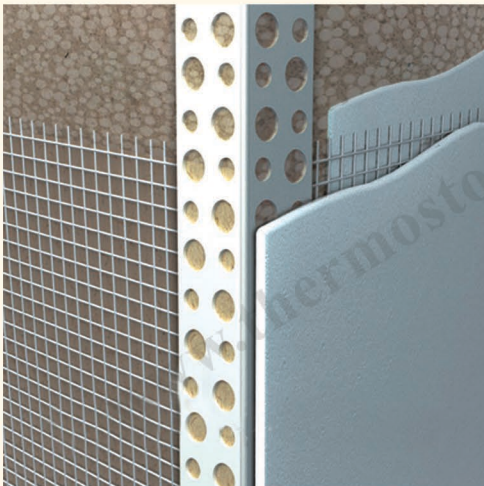
Manual Cutting With Heavy Duty Blade



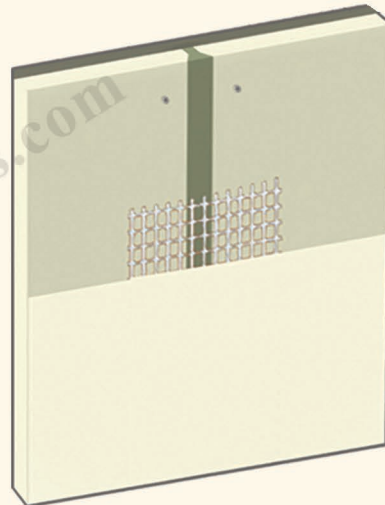
Machine Cutting With Normal Wood Cutting Machine



Corner bead



Joint Filling



Panel & Board Fixing Products



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