



KT PANEL

DURABLE FIBRE
CEMENT BOARD

DRYLINING SOLUTIONS



KINGTEC

In public buildings and high traffic areas, the crowd pressure is extremely immense. The inner walls must be able to stand the challenges in the corridor of schools, in the aisles of hospitals or in sports facilities. For dry construction solutions in these highly frequented areas **KINGTEC** has developed a high performance fibre cement board which would also take care of water attack: **KINGTEC KT Panel**.

The Problem!

- High stress of buildings and their walls, caused through high traffic special load (e.g. hospitals) and vandalism (e.g. Schools)
- High renovation requirement in public buildings
- Security, robustness, longevity and quality needs
- Special demands on sound protection and fire protection

The solution: **KINGTEC KT Panel**

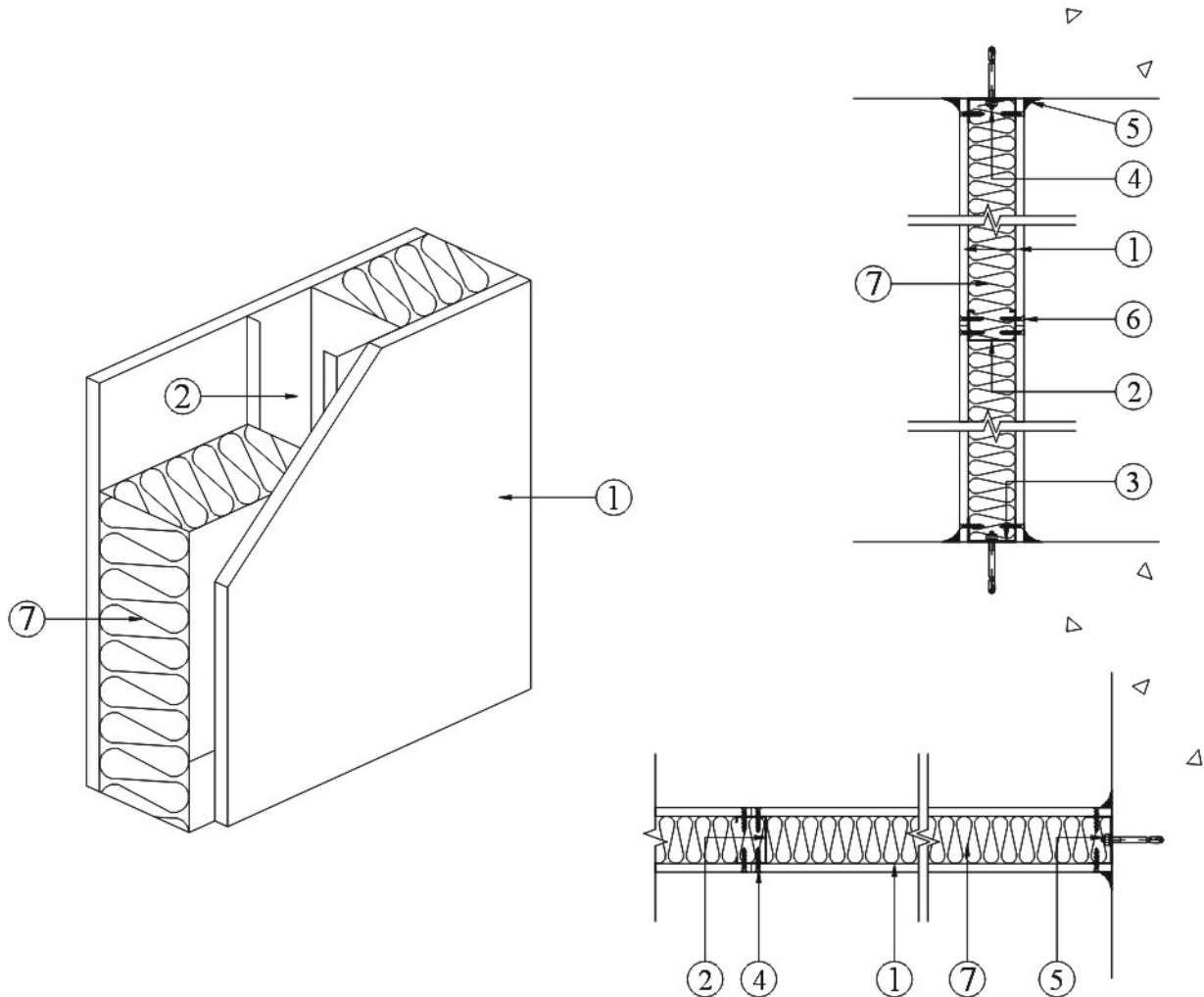
- Composed of inorganic raw material such as cement, silica and cellulose fibre
- High scratch resistance, impact resistance
- Smooth surface
- Autoclaved to create stable properties
- Simple joint treatment for tapered board edge
- High bending strength, low water absorption rate

KINGTEC KT Panel is the ideal board for water resistance, impact-resistance, abuse resistance in public buildings such as school or hospitals, where robustness, longevity and quality are particularly important. It is well qualified for internal and external environment.

KINGTEC KT PANEL

PROPERTIES	KINGTEC KT PANEL
Neutral designation	Fibre Cement 100% asbestos free
Material class	Non-combustible Acc. To BS476: Part 4
Surface spread of flame	Class 1 Acc. To BS476: Part 7
Building Regulations Classification	Class 0 Acc. To BS476: Part 6
Raw density	Approx. 1200 kg/m ³
Thermal conductivity	Approx. 0.18 W/mk
Coefficient of expansion	-2.0 x 10 ⁻⁵ m/mk
Linear expansion rate	0.1%
Water Content	3.1%
Water Absorption Capacity	35%
Expansion when under water (100% saturation)	0.14%
Minimum radius of curvature	1500mm for 6mm thick KINGTEC KT Panel
Flexural strength F Longitudinal Transverse	12.5 N/mm ² 10.5 N/mm ²
Board sizes	1220 x 2440 mm
Thicknesses	6mm, 9mm, 12mm Other thickness upon request
Edge detail	Taper along the long side for taping & jointing
Tilability	Max.tile weight 32kg/sq.m

KINGTEC FIRE / IMPACT RESISTANT FIBRE CEMENT BOARD PARTITION SYSTEM



Technical Data:

1-Hour fire rating, integrity & insulation

According to BS476: Part22, with fire risk from both sides

Overall partition thickness = 66mm

Sound reduction $R_w = 49$ dB

(when 75mm wide stud is used, with 50mm thick 100kg/cu.m BNBM rockwool)

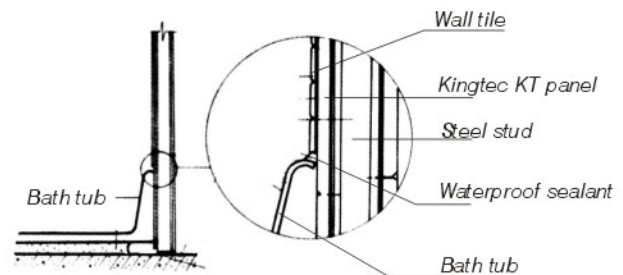
- (1) **KINGTEC KT Panel** fibre cement board
- (2) 50mm x 0.5mm G.I. Stud at 610mm centres
- (3) 50mm x 0.5mm G.I. 'U' channel
- (4) Nailable plug at 600mm centres
- (5) Fire resistant mastic
- (6) Drywall screw at 250mm centres
- (7) 50mm thick, 80kg/cu.m, BNBM rockwool

8mm thick

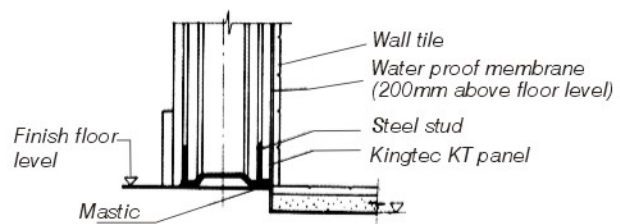
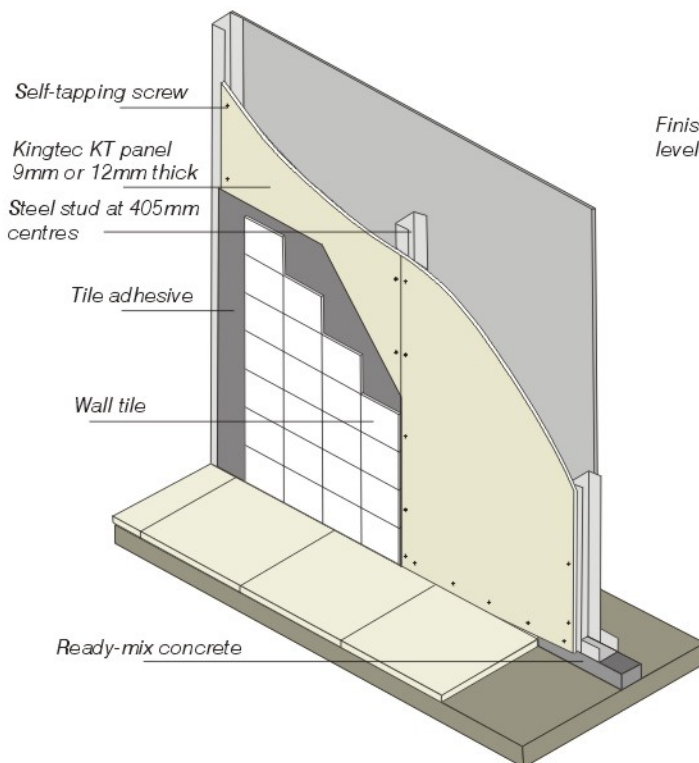
KINGTEC KT PANEL WET AREA APPLICATION

The main function of constructions in damp and humid areas is to prevent water or moisture penetration into internal walls, floors and ceilings. Damp or humid areas should always be built from material that can withstand moisture and water. **KINGTEC KT Panel** composed of fibre cement is processed by high pressure. It is stable and water resistant, and has been developed for demanding applications such as the following:

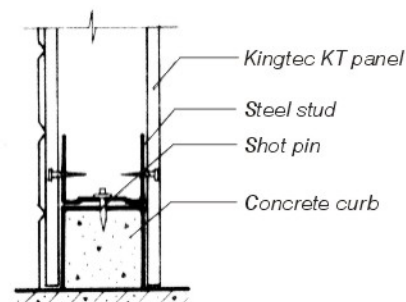
- Bathrooms
- Car washes
- Cold stores
- Hospitals
- Hotels
- Kitchens
- Laundries
- Leisure centres
- Sports centres
- Swimming pools
- Prefabricated units with tiled walls



Conjunction between bath tub and wall



Wall anti water permeating construction



Wall anti water permeating construction

KINGTEC KT PANEL WALL LINING SYSTEM

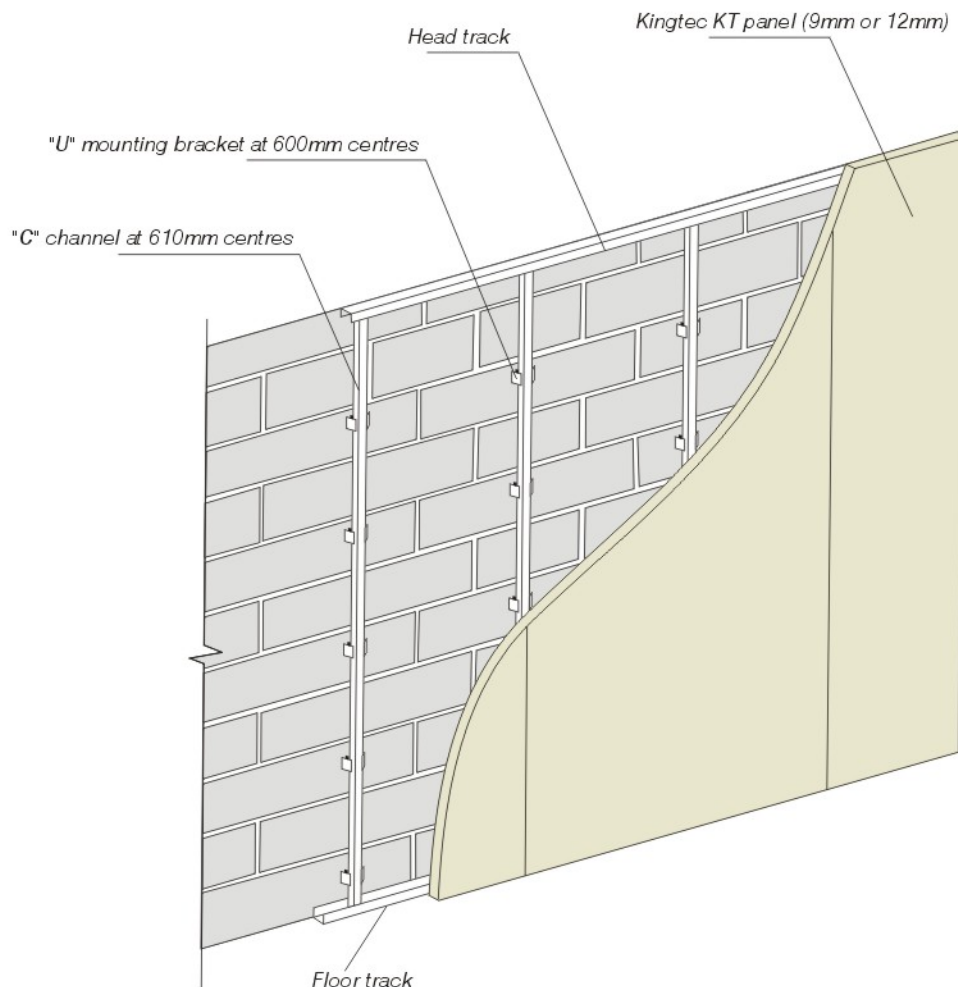
Wall Liner should be specified:

- Where a variable stand-off clearance is required between lining and background.
- Where background is poor or damp.
- Where insulation is required within the wall lining void.
- Where deep service runs are required to be accommodated within the lining void.

This system utilizes metal channel and bracket components to form a rigid framework for plasterboard linings.

'U' Mounting Brackets provide a variable stand-off from the background. The lining void facilitates the introduction of thermal or sound insulation and provides containment for service runs. 'C' Channel forms the main wall lining stud which has extra wide flanges promoting strength and greater sealing for vapour resistance and board attachment.

The system is capable of overriding substantial irregularities in the background.

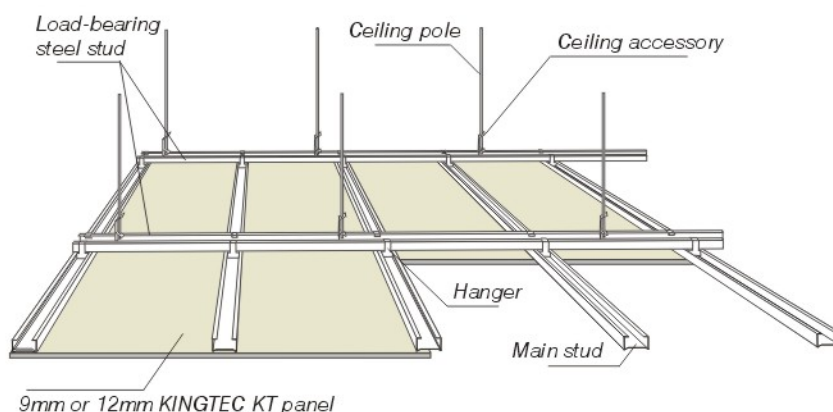


KINGTEC KT PANEL CEILING SYSTEM

KINGTEC KT Panel can combine with different kinds of channel to form ceilings / bulkheads. These ceilings are simple to install. They are designed for various decoration effect and harsh environments such as high temperature, high humidity.

C-Form Channel Ceiling

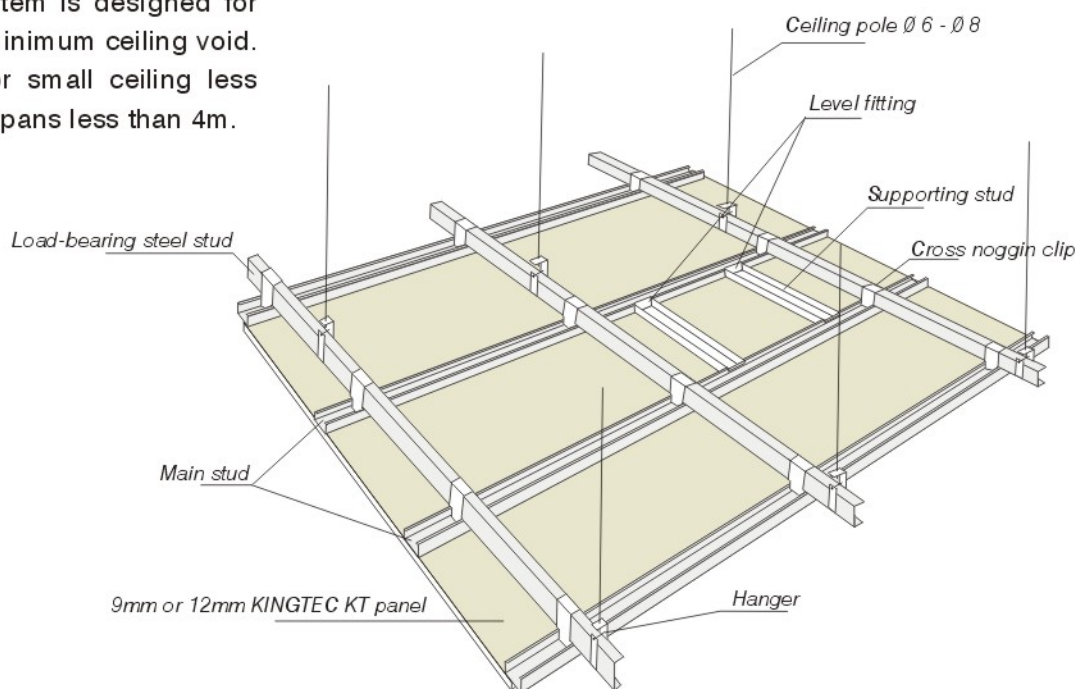
This ceiling system can be designed to various 3-D modeling with gradual pattern effects. It is popular for large sized ceiling over 50m² and spans in excess of 4m and for deeper ceiling void over 450mm. C-shaped Channel ceiling should be considered when the imposed load is 80-100kg.



C-Form ceiling system for large area (over 50 sq.m)

Lightweight Ceiling

This ceiling system is designed for simplicity and minimum ceiling void. It is suitable for small ceiling less than 50m² and spans less than 4m.



Lightweight ceiling system for small area (less than 50 sq.m)

Fixing and fastenings

KINGTEC KT Panel shall be fixed to steel or timber studs by countersunk cutting head screw.

Because of its strength it is easy to attach different hangers to **KINGTEC KT Panel**. Fastenings for heavy attachments should be centered on internal studwork.

Installation

KINGTEC KT Panel requires careful installation to ensure that its full potential is realized. In areas where tiling is required, it is essential to comply with the relevant codes of practice on board dryness and the secure and rigid bracing of the boards for tiling.

Fixing procedure

1. **KINGTEC KT Panel** should be fixed to either timber or steel studs at 610mm maximum centres. All framing must be straight, plumb and true, and must provide firm support for the boards.
2. Cut the boards 5mm shorter than the floor-to-ceiling height, and butt them firmly against the ceiling.
3. Fix screws or nails, commencing at the centre of the board and working towards the edges.
4. Fix further boards, allowing a 3mm gap between boards. Joints on both sides of the partition should be on the same stud to facilitate sealing.
5. Seal joints with a silicone sealer.

Decoration

Painting & Papering

Any conventional paints can be used. Alkali resistant primers are not necessary. Water based paints (with a watered down first coat) or oil based paints can be applied to all products using proprietary primer/top coat systems as recommended by paint manufacturers.

When papering **KINGTEC KT Panel**, size to seal against suction and improve slip, then hang papers or vinyl in the normal way.



Plastering

If a skim finish is desired, fix textured side out, apply a sealing coat of universal primer and allow to dry. Follow with a second coat. Apply plaster while this coat is wet and tacky. At all times strictly follow plaster/jointing compound manufacturers' instructions for applying to fibre cement boards.

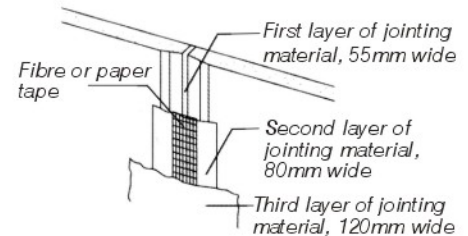


Tiling

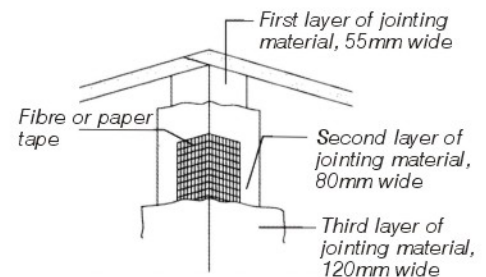
Minimum 9 mm thick boards should be used. Supports should be maximum 400mm centres with cross noggins at transverse board joints. Seal the boards with P.V.A. Countersunk corrosion resistant screws should be used to fix boards at 200mm centres. Fix tiles in strict accordance with manufacturers' recommendations.



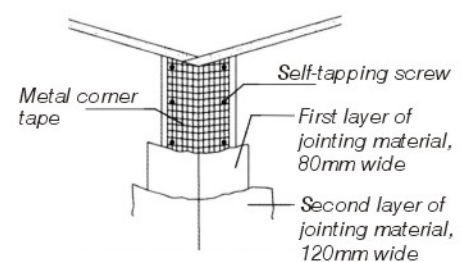
Seamless jointing



Taper edge jointing



Wall corner (inside) surface jointing



Wall corner (outside) surface jointing