

## FC EW 3 - 9mm Fibre Cement Sheet + 9mm Magnesium Oxide Board

Assembly #	Stud Size (mm)	Steel			Exterior Cladding	Building Wrap	Cavity Fill	Interior Lining
		Thickness (mm)	Coating	Grade				
FC EW 3	75 to 100	0.75 to 2.00	Z180 to Z350	G350 to G550	FRAMECAD® 9mm Fibre Cement Sheet	FRAMECAD® Tuff Stuff Wrap	Rockwool Density of 40 kg/m <sup>3</sup>	FRAMECAD® 9mm Magnesium Oxide Board

**Framing and Wall Height**

FRAMECAD® Stud width shall be 35mm minimum. Stud spacing shall be at 610mm centers maximum. Frame height as determined by specific design.

**Cladding**

One layer of FRAMECAD® 9mm Fibre Cement Sheet on the exterior side of FRAMECAD® cold formed steel wall frames.

Claddings are fixed a minimum of 50mm off the ground level unless a "Z" flashing is provided or as per local building regulations.

All Sheets to extend below the finished floor level by a minimum of 50mm.

**Building Wrap**

Install horizontally with a 150mm overlap between runs, with each higher run lapping over the layer below. Install external cladding without delay.

To be effective as a thermal insulator there must be a minimum air gap of 40mm adjacent to at least one reflective foil face.

*Note: Aluminum foil is susceptible to alkali attack and therefore should not come in contact with wet concrete.*

**Cavity Fill**

Rockwool Insulation. Avoid creating gaps and spaces, as they will allow air to bypass the insulation and escape. Cut batts to length by setting the top of the batt into the space and cutting against the bottom plate with a sharp utility knife. Leave an extra 25mm (1/2 inch) of length for a complete fit. Stuff strips of batting into spaces around windows and doors. The insulation should fit snugly, don't pack it.

Rockwool cavity insulation density 40 kg/m<sup>3</sup> or as per local building regulations.

**Lining**

One layer of FRAMECAD® 9mm Magnesium Oxide Board on internal side of the FRAMECAD® cold formed steel wall frame.

Vertical fixed full height sheets shall be used where possible.

Horizontal fixing is permitted as long as all end sheet joints are formed over framing.

When sheet end butts joints are unavoidable, they shall be fixed at 200mm centres and formed over framing.

Linings are fixed 10mm off the floor.

**Fastening**
**Cladding**

FRAMECAD® 9mm Fibre Cement Sheets to be fixed using 030149 FRAMECAD® X-Drive® 8g x 35mm Winged Drill Point screws, at 300mm centers along sheet perimeter and centre studs. Fastening placement should be 12mm from sheet edge and 50mm from sheet corners. All end joints must be touch fitted.

**Lining**

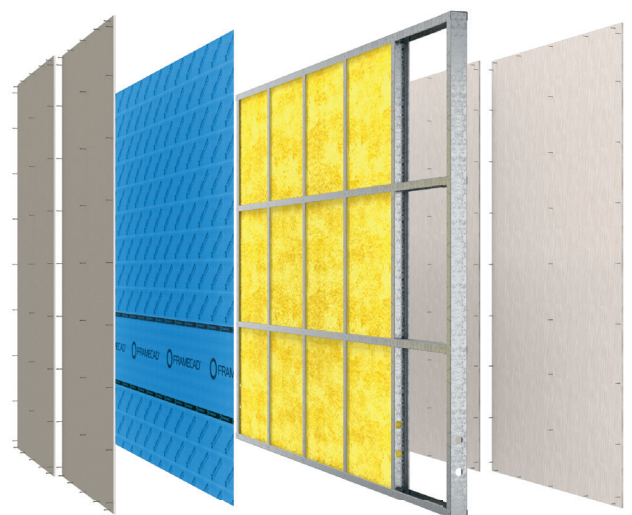
FRAMECAD® 9mm Magnesium Oxide Board to be fixed using 001848 FRAMECAD® 6g x 32mm Bugle Head Drill Point screws, at 300mm centers along sheet perimeter and centre studs. Fastening placement should be approximately 12mm from sheet edge and approximately 50mm from sheet corners. All end joints must be touch fitted.

*Note: FRAMECAD® recommends a glue and screw method to aid linings being affixed to wall, ceiling and floor frames. Glue dabs must be intermittent with a minimum distance of 100mm from fastening placement.*

**Jointing and Finishing**

All screw heads to be covered and all sheets joints to have reinforced tape and stopped in accordance with the covering / jointing compound manufacturers recommendations.

Refer to FRAMECAD® Insulated Façade System Technical Guide and the FRAMECAD® Fibre Cement Technical Guide for further details.



**NOTE:** In order for FRAMECAD® Wall Solutions to perform as designed all components must be installed exactly as prescribed. Substituting building components may produce an entirely different solution and may seriously compromise performance.

FC EW 3 - 9mm Fibre Cement Sheet + 9mm Magnesium Oxide Board

FRAMECAD® Design and Build System encompasses a full range of building FRAMECAD® Sub-Assemblies that meet fire, thermal and acoustic values, or that are suitable for general lining and cladding. For details on the appropriate assembly for your project please contact us. [www.framecad.com](http://www.framecad.com)

**FRAMECAD® Ceiling Assembly Solution**  
August 2013

9.5mm Gypsum Board - Internal Ceiling

Assembly #	Stud Size (mm)	Thickness (mm)	Coating	Grade	Insulation	Interior Lining	Fire	Acoustic STC dB	Thermal R (m² KW)
FC C 2	FRAMECAD® Ceiling Battens	8.55 Minimum	Z275	G250 to G500	Glasswool (Optional)	FRAMECAD® 9.5mm Gypsum Board	30 min.	45	R = 1.3

**Ceiling Batten**  
FRAMECAD® Ceiling Batten spacing shall be at 450mm centers maximum.

**Cavity Fill (Optional)**  
Glasswool insulation. Avoid creating gaps and spaces, as they will warm air to bypass the insulation and escape. Cut batts to length by setting the top of the batt into the space and cutting with a sharp utility knife. Leave an extra 25mm (1 1/2 inch) of length for a complete fit. Stuff strips of batts into space. The insulation should fit snugly, don't pack it.

Glasswool insulation Thickness 90mm  
Glasswool insulation target - R Value 1.3

**Lining**  
One layer of FRAMECAD® 9.5mm Gypsum Board fixed to FRAMECAD® stud formed steel ceiling battens.  
Full length sheets shall be used where possible.  
All butt joints must be formed over framing.

Linings are fixed flush with wall lining.

**Fastening**  
**Ceiling Lining**  
FRAMECAD® 9.5mm Gypsum Board to be fixed using 001888 FRAMECAD® 5 x 25mm Bugle Head, Dill Point screws, at 300mm centres along the perimeter and center studs. Fastening placement should be 12mm from sheet edge and 50mm from sheet corners. All end joints must be staggered and batten fit.  
*Note: FRAMECAD® recommends a glue and screw method to aid in fitting affixed to wall, ceiling and floor frame. Glue dabs must be at a minimum distance of 100mm from fastening placement.*

**Joining and Finishing**  
All screw heads to be mopped and all sheet joints to have a mopped and stopped in accordance with the stopping / jointing compound manufacturers recommendations.

**FRAMECAD® Wall Assembly Solution**  
August 2013

9mm Fibre Cement Weatherboards + 15mm Fire Retardant Gypsum Board

Assembly #	Stud Size (mm)	Thickness (mm)	Coating	Grade	Insulation	Interior Lining	Fire	Acoustic STC dB	Thermal R (m² KW)
FC EW 2	80 to 100	12.25 to 14.88	Z275	G250 to G500	FRAMECAD® 9.5mm Fibre Cement Weatherboards	FRAMECAD® 15mm Fire Retardant Gypsum Board	1 hr.	45	R = 1.6

**Framing and Wall Height**  
FRAMECAD® stud walls that be 200mm minimum. Stud spacing shall be at 600mm centres maximum. Frame height is determined by specific design.

**Cladding**  
One layer of FRAMECAD® 9mm Fibre Cement Weatherboards on the exterior. Products to be a minimum 500mm off ground level unless a "Z" Rating is required or as per local building regulations.

**Building Wrap**  
FRAMECAD® 15mm Fire Retardant Gypsum Board to be fixed using 001888 FRAMECAD® 5 x 25mm Bugle Head Dill Point screws, at 300mm centres along the perimeter and center studs. Fastening placement should be 12mm from sheet edge and 50mm from sheet corners. All end joints must be staggered and batten fit.  
*Note: FRAMECAD® recommends a glue and screw method to aid in fitting affixed to wall, ceiling and floor frame. Glue dabs must be at a minimum distance of 100mm from fastening placement.*

**Cavity Fill**  
Glasswool insulation. Avoid creating gaps and spaces, as they will warm air to bypass the insulation and escape. Cut batts to length by setting the top of the batt into the space and cutting with a sharp utility knife. Leave an extra 25mm (1 1/2 inch) of length for a complete fit. Stuff strips of batts into space. The insulation should fit snugly, don't pack it.

**Lining**  
One layer of FRAMECAD® 15mm Fire Retardant Gypsum Board on internal side of the cladding steel wall frame.

**Vertical Sealing**  
Full length sheets shall be used where possible. When non-lengthwise, full length sheets shall be used where possible. All butt joints must be formed over framing. All sheet joints must be formed over framing. Linings are fixed 100mm off the face.

NOTE: In order for FRAMECAD® Wall Solutions to perform as noted and longer life expectancy than the installed assembly, a structural substrate building components may produce an entirely different solution and may not meet compliance performance.

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