Technical Manual

South Africa

LAFARGE

Introduction

The Lafarge Gypsum business unit ('Gypsum'), part of Lafarge South Africa, manufactures and markets gypsum-based building products for constructing, finishing or decorating interior walls and ceilings in residential, commercial and institutional construction projects. Lafarge Gypsum strives to be the leading supplier of interior finishing products in sub-Saharan Africa, focused on gypsum plasterboard and complementary systems, while creating value for all stakeholders in the business.

The business unit operates a gypsum mine at Pofadder in the Northern Cape Province and two international class manufacturing facilities in the south-east of Johannesburg: a plasterboard factory at Roodekop, which began production in 2007, and a factory in Alrode, which manufactures steel ceiling grids, metal studs, aluminium profiles for partitioning frames, associated accessories and access flooring.

We are the only plasterboard manufacturer to have the Ecospecifier green lables for all our plasterboards, compounds and vinyl ceiling tiles which means that the use of our products enhances green ratings for Green Buildings. We offer support and training to both our residential and commercial customers through increased training and mobile technical assistance which includes but is not limited to on site assistance. In addition we offer in store marketing support to our valued customers and will ensure that our sales teams are involved and engaged in the advertising and promotional grids of your respective stores.

As leaders in innovation we are continuously seeking to add value and growth to the various segments we do business in by not merely selling a product but by offering technical interior solutions.

Our goal is to strengthen our position by being the best, through our commitment to being the preferred:

- supplier for our customers
- company for our employees
- partner for our communities
- investment for our shareholders

Lafarge plasterboard and associated ceiling and partition systems are sold to installers through a network of stores in South Africa, Botswana and Mozambique. Gypsum's products are also distributed to specialised resellers and hardware stores

For more information, visit www.lafarge.co.za

Lafarge Gypsum South Africa
18 Barium Street, Alrode Ext 7, 1448
Telephone: (011) 389 4500 I Fax: (011) 864 6816

Lafarge Gypsum South Africa Product Range

Lafarge Gypsum offers a comprehensive range of plasterboard systems to meet the practical and performance needs of new build and refurbishment projects, covering all sectors of the market, residential, commercial, retail, hospitality & health. The comprehensive range of systems is designed to offer the Architect, Developer and Specifier the possibility of translating exciting visual concepts into actual on-site reality.

Plasterboard Types

Standard plasterboards

6.4mm square edge
- 2400x900 - 2400x1200
- 2700x900 - 2700x1200
- 3000x900 - 3000x1200
- 3300x900 - 3300x1200
- 3600x900 - 3600x1200
  - 4200x1200

9mm tapered edge
- 2400x 1200
- 2700x1200
- 3000x1200
- 3300x1200
- 3600x1200

12mm tapered edge
- 1200x2400,2700,3000, 3300,3600

15mm tapered edge
- 1200x2700,3000

Technical Plasterboards

12,5mm & 15mm Firecheck Tapered edge
- 2700x1200
- 3000x1200

12,5mm & 15mm Moisture Check Tapered edge
- 2700x1200
- 3000x1200

Lafarge Gypsum plasterboards

Construction practice and Building Regulations call for a range of boards to match specific installation needs

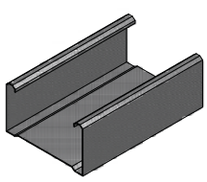
LG plasterboards are complemented by high performance products specifically designed for fire resistance, moisture resistance, acoustic applications and provide thermal and vapour resistance when used in conjunction with complementary other product

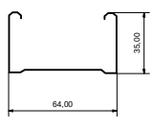
LG plasterboards are manufactured to SANS 266 – 2003 standards

LG plasterboards systems are tested for fire resistance to SANS 10177 Part 2 – 2005 For stability, integrity and insulation

Lafarge Gypsum Studs

- 51mm
- 58mm
- 64mm
- 102mm

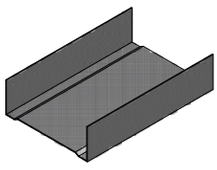


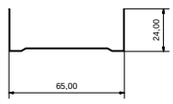


Lengths
2400,2700,3000,3000,3600
Or can be made to required length max 8m

Lafarge Gypsum Track

Lengths 0f 3000mm
- 52mm
- 59mm
- 65mm
- 103mm





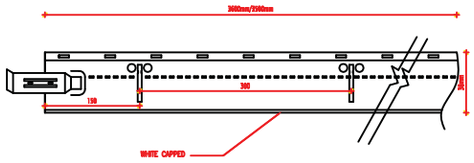
Lafarge Gypsum Partition & metal system sections

LG has developed a complete range of metal systems for use in combination with its plasterboards and accessory products. Together they provide solutions to meet all the design requirements of a modern construction market

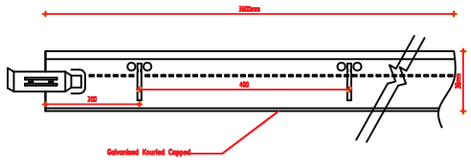
To complement its range of plasterboard partitions, ceilings, and plasters, LG offers specialist accessories such as aluminium trim systems, door and window frame kits, access panels and fixings

T Bar Grid Ceiling System

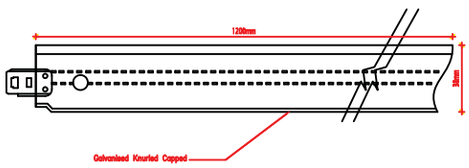
LG suspended exposed and suspended fixed systems comprise of high quality T Bar grid sections that are assembled to form a grid system where product is either lay-in or fixed to form a ceiling system. A full range of plasterboard, ceiling tiles and plasters are available to complete to specific requirements. These systems offer easy access for general maintenance plus solutions for both aesthetic and acoustic absorbance requirements (NRC).



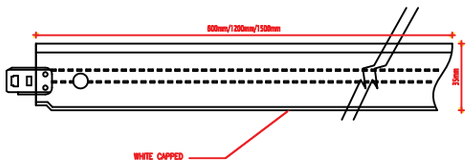
Exposed Main Tee



Plaster Grid Main Tee



Exposed Grid Cross Tee



Plaster Grid Cross Tee

T Bar System

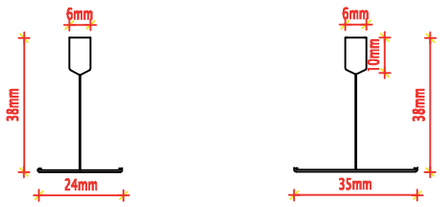
Exposed main tee's
25mm white cap face
- 3600mm
- 3500mm

Exposed cross tee's
- 1500mm
- 1200mm
- 600mm

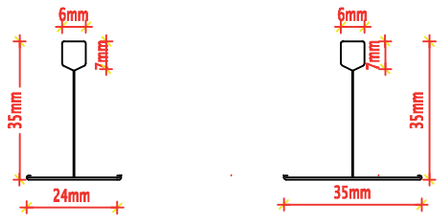
Plaster Grid main tee's
35mm galvanized knurled face
- 3600mm

Plaster cross tee's
- 1200mm

Lafarge Main Tee 3600mm/3500mm



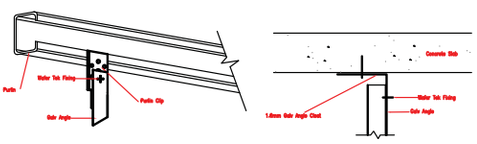
Lafarge Cross Tee 1200mm



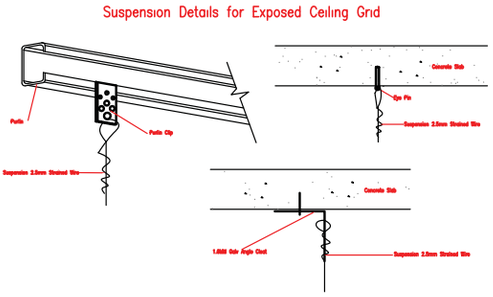
White Capped Ceiling Tee's

Lafarge Gypsum T Bar System Accessories

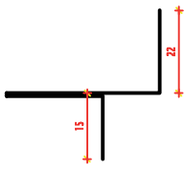
Suspension Details for Plastered Ceiling Grid



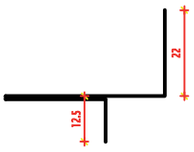
Suspension Details for Exposed Ceiling Grid



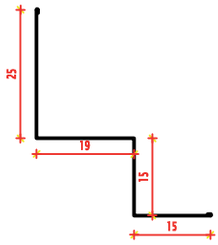
Perimeter Trims



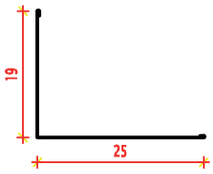
Shadow line Plaster trim 12mm board



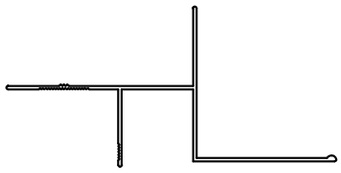
Shadow line Plaster trim 9mm board



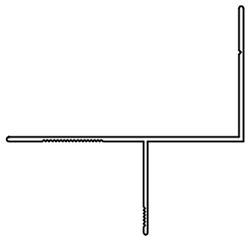
Shadow line Wall angle



Standard Wall angle



DIE 6640 Plaster Ceiling Junction

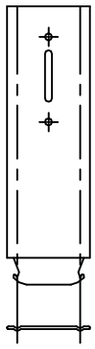


DIE 6640 Plaster Board Trim

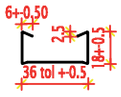
Lafarge Gypsum Steel Brandering System

Knurled
- 2400mm
- 2700mm
- 3000mm
- 3300mmm
- 3600mm

Suspension bracket
- Straight joiner
- 2 way joiner
- 3 way joiner
- 4 way joiner



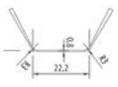
Suspension Bracket



Steel Brandering

Lafarge Steel Brandering has been designed as an alternative to timber brandering. Steel brandering can also be used in bulkhead construction. A range of joiners are also available to facilitate change in direction and easier construction. The advantages in using steel brandering range from being cost effective, transportation, handling and storage, easy to suspend, easy to level, straightness, varied lengths, easy cutting, minimum wastage, easy installation and eco friendly.

Lafarge Gypsum Steel Brandering Accessories



Straight joiner

2 way joiner

3 way joiner

4 way joiner

Lafarge Gypsum Plasters

Lafarge Gypsum range of plaster compounds

Plaster product
(Full skim)
- Lafarge Skim – Lite 40kg
- Lafarge Skim – Stone 33kg

Finishing product
(Full skim)
- Lafarge Finishing compound 25kg

Jointing product
(Plasterboard joints)
- Lafarge Premium Jointing Compound 20kg

Plasterboard is finished using plaster compounds, where either a final float finish or sanding is undertaken and then finally painted to achieve a smooth and even appearance.

No building lining system has a surface that is perfectly flat and totally free of imperfections. By paying attention to framing, plasterboard sheet orientation, paint finishes and lighting conditions, it is possible to attain the perception of flatness.
The range of plaster compounds, when applied to specification will assist in achieving the finishes as specified.

Introduction to Lafarge Plasterboard Product Range

Plasterboard properties

Plasterboard consists of a core that is made from gypsum, a naturally occurring material. The liner paper used to make this product is biodegradable and made from 100% recycled paper. Hence, the environmental benefit of Plasterboard is that it is 100% recyclable.

The plasterboard manufacturing process operates under strict environmental guidelines, adhering to and encompassing the following:

- Efficient use of energy and water
- Efficient collection and monitoring of dust
- Ongoing waste reduction
- Minimisation of plant impact on surroundings

Technical Specification & Material Safety:

Standard plasterboard is not classified as hazardous as the product is non-toxic and Non-flammable.
Material Safety Data Sheets are available on request from our Technical Department.

The Lafarge Plasterboard range is manufactured according to SANS 266-2003.

PRODUCT RANGE IDENTIFICATION

• Lafarge Gypsum Standard Plasterboard:

Lafarge Standard Plasterboard is identified by the ivory face and brown backing paper liners, with no special additives to the gypsum core or special treatment to the paper liners except that with the 6,4/9/12/15mm plasterboard, fibreglass strands have been added to the core to allow for greater strength and flexibility. This product is used for domestic and commercial ceiling applications as well as partitioning applications. Lafarge Standard Plaster board is also used to create bulkheads, curved ceilings and curved walls.

Lafarge Gypsum Technical Plasterboard:

The Lafarge Technical Plasterboard composition is manufactured to enhance and meet particular environmental specific design, performance and utilitarian requirements. Lafarge manufacturers two types of technical plasterboards, namely:

Lafarge Gypsum Fire Check Plasterboard:

The Lafarge Fire Check Plasterboard has exfoliated vermiculite and fibreglass strands in the gypsum core to increase fire resistance. It is differentiated by its covering of pink paper liner. Available in 12,5mm and 15mm thicknesses and is recommended for areas where additional fire resistance is required, e.g.: kitchens, record & filling rooms, fire escapes and specified office partitions.

Lafarge Gypsum Moisture Check Plasterboard:

Lafarge Moisture Check Plasterboard has silicone in the gypsum core and is suitable for use in ‘wet areas” showers, bathrooms, kitchens and protected external applications. Lafarge Moisture Check 12.5mm and 15mm Plasterboard can be used in areas where ceramic wall tiling is required. This plasterboard is not suitable for protection against continuous dampness or as a base for cement rendering. Moisture Check Plasterboards are lined on both sides with a distinctive green water repellent paper for ease of identification. The boards are not suitable for use in temperatures above 52°C, and must not be subjected to freezing temperatures without risk of damage.

Building with Plasterboard

The comprehensive range of Lafarge Plasterboard 'specific systems' meet both the practical and performance needs of both new and refurbishment projects, ranging from basic to high-end systems.

Profile

The 6.4mm Lafarge Plasterboard is manufactured with a square edge only. The Lafarge 9mm, 12mm / 12.5mm and 15mm Plasterboards are manufactured with a taper edge.

The 12mm / 12.5mm and 15mm boards can be manufactured with a square edge if required, but is dependent on order volume. Enquire from Sales beforehand.

Taper edges on the long ends of Plasterboard are provided to ensure that jointing can be achieved easily with a smooth and level finish.

I.I Performance Specifications / Properties

- **Dimensional Stability:**

Plasterboard is dimensionally stable when compared to other building materials.
Two measures of dimensional stability are listed below:

- Thermal coefficient of linear expansion (α) = 16.7 x 10^{-6} / °C, measured unrestrained over the temperature range of 3 °C - 32 °C
- Hygral coefficient of expansion = 6.5 x 10^{-6}/ %RH, measured unrestrained over the Relative Humidity (RH) range of 10% - 90%

- **Thermal Properties:**

Thermal conductivity (k) is the measure of a material's ability to transmit heat; it is expressed as heat flow in watts per square metre of surface area for a temperature difference of 1°C per metre thickness and is expressed as W/m^2°C.

Thermal coefficient of linear expansion (α) = 16.7 x 10^{-6} / °C, measured unrestrained over the temperature range of 3°C - 32°C

Hygral coefficient of expansion = 6.5 x 10^{-6} / %RH, measured unrestrained over the Relative Humidity (RH) range of 10% - 90%

The lower the (k) value of the material, the better is its insulation.

The R-value of plasterboard is a measure of its thermal insulation ability. Higher numbers indicate a better insulator.

Therefore, for the Lafarge plasterboards, we have the following product R values:

- 6.4mm Lafarge Plasterboard R value = 0.04 Km^2/W
- 9mm Lafarge Plasterboard R value = 0.053 Km^2/W
- 12mm Lafarge Plasterboard R value = 0.070 Km^2/W
- 15mm Lafarge Plasterboard R value = 0.095 Km^2/W

Sound Insulation Performance (Acoustics):

There are three types of acoustic functions-

I.) Sound Insulation:

Sound insulation refers to the ability of a material or partition / ceiling system to stop or reduce airborne sound.

a) Internal Sound Insulation:
Internal sound insulation is important when designing a partition wall, to stop noise passing through from an adjoining room
b) External Sound Insulation:
External sound insulation refers to the ability of materials to reduce sound transferring into or from a building. Good external sound insulation is important when designing and constructing external elements of a building. This includes walls, windows, doors, ventilation and roofing.

II.) Sound Absorption:

Sound absorption is the ability of a material to absorb sound within a room.

III.) Flanking:

Flanking is the transfer of noise through paths around a building element, rather than through the element itself. Flanking describes the transfer of noise through, gaps, cracks in the building element, and incorrectly sealed junctions between objects.

Description of common terms used when describing sound insulation performance:

dB= The decibel (dB) is the unit used for sound level measurement. Variations of (dB) are used for different types of noise measurement. The most commonly used variation is the (dBA)

dBA= Unit of sound level in weighted decibels. The human ear is not equally sensitive to all frequencies of sound. The A weighting approximates the sensitivity of the ear by filtering these frequencies. A (dBA) measurement is considered representative of average human hearing.

Rw= Known as the Weighted Sound Reduction Index, Rw is a single number (dB) referring to the ability of a wall or other building structure to provide sound insulation. The higher the number, the better the sound insulation. Rw refers to sound insulation achieved in an acoustic testing laboratory.

DnT,w= Referred to as the Weighted Standardised Field Level Difference, DnT,w, is a measure of the sound insulation performance of a building element that indicates the level of speech privacy between spaces. It is characterised by the difference in noise level on each side of a wall or floor. It is a field's measurement that relates to the Rw laboratory measurement. The higher the number, the better the insulation performance.

L'nT,w= Referred to as Weighted Standard Field Impact Sound Pressure Level. L'nT,w is a measure of noise impact performance on a floor. It is a field measure of the amount of impact sound reaching a space via a floor. It is measured in the field and is therefore subject to inherent inaccuracies. It is the equivalent field measurement to the L'n,w laboratory measurement. The lower the number, the better the performance.

Rw + Ctr= This measures the same as Rw but includes am adaptation factor (Ctr) to take into account low frequency sounds generated by home theatre and sound system equipment. The adaptation factor is a negative number and therefore Rw + Ctr is lower than Rw. This is the appropriate measurement for internal sound insulation

NRC= The Noise Reduction Coefficient, defines how much sound specific materials absorb, It is the average sound absorption between 250Hz-2kHz. A material with low NRC rating absorbs little sound and a material with a higher NRC rating absorbs more sound.

- Effect of Different walls on sound insulation performance:

Rw	Rw + Ctr	Effect of different values of Rw and Rw + Ctr On sound insulation performance
25	22	Normal speech can be heard
30	25	Loud speech can be heard
35	28	Loud speech can be heard but not understood
42	35	Loud speech heard as a murmur
45	38	Must strain to hear loud speech
48	40	Loud speech can barley be heard
53	44	Loud speech cannot be heard
63	55	Music heard faintly, bass notes 'thump'
70	60	Loud music still heard faintly

*Note: Lafarge Gypsum has a programme that can calculate acoustic requirements on information given and make recommendations. This programme is theoretically based.

- Fire Resistance:

Plasterboard is naturally fire resistant. The core slows down the spread of fire by releasing chemically bound water when heated. This is a similar process to evaporation and aids cooling.

Systems Fire testing is carried out in accordance with SANS 10177- 2, Fire testing of materials, components and elements used in buildings Part 2: Fire resistance test for building elements.

Fire systems are rated to withstand a fire under test conditions for a certain period of time. This is known as the fire resistance level (FRL) and consists of three main evaluation criteria.

Evaluation Criteria

I.) Stability: The ability to maintain stability
II.) Integrity: The ability to resist the passage of flames as specified
III.) Insulation: The ability to maintain a temperature over the whole of the exposed surface below that specified in the test standards
IV.) Loadbearing: Loadbearing elements are to remain below the softening point for the duration of the required fire rating.

- **Continuity and Installation.**

Fire rated systems must be built in accordance with the specific instructions, there are some variations allowed that will not degrade the performance of the system:

- Increasing cavity width
- Increasing stud size or metal thickness
- Adding noggins to support fixtures or services
- Decreasing the stud spacing
- Decreasing the fastener spacing
- Adding specified layers to a system up to a weight of 20kg/m2 and no thicker than 25mm.
- For load bearing walls, the load per stud must include the extra lining

- Modifications to Fire rated Systems

Fire rated systems are often modified by the installation of:

- Fire rated inspection hatches
- Fire rated power points
- Fire rated light fittings
- Fire rated doors
- Fire Dampers

- Electrical cables
- Metal or plastic pipes
- Other fire rated penetrations

It is the responsibility of the manufacturer of these components to ensure that the fire and acoustic properties of the plasterboard system are maintained.

Fire Hazard Properties:

Fire hazard properties relate to the combustibility of plasterboard, or for that matter any other building material product, and not its performance in a fire test. For product combustibility information refer to SANS 10400 National Building Regulations.

1.2 CONTEXTUAL APPLICATION & PROTECTION

Condensation & Ventilation:

Condensation of water onto either the face or back of the plasterboard must be avoided. Insufficient protection from condensation can result in joint distortion, plasterboard sagging, mould growth and fastener popping. Many inter-related factors must be taken into account to control condensation. A good practice is to make use of wall/ ceiling insulation and vapour barriers, as well to especially employ good ventilation solutions.

Plasterboard can also be affected by high humidity conditions after installation and prior to painting. Rain entering unsealed buildings, water on floors or other sources of open water may cause excessive humidity. This humidity may be absorbed by unpainted plasterboard resulting in sagging ceilings. Therefore plasterboard must not be installed until the building is waterproofed.

To minimize the effects of condensation:

- Use Moisture Check plasterboard to increase protection against moisture
- Use moisture barriers. However it is important that the right type is selected for the construction type and that it is installed correctly (refer to manufacturers specifications)
- Use foil backed insulation under metal roofs as they are susceptible to forming condensation
- Install eaves, gable or ridge vents in the roof cavity
- Remove humidity from bathrooms via an exhaust fan to the outside
- In hot humid climates where the building is air-conditioned below the dew point of the outside air, the wall and ceiling framing members and internal linings should be fully protected by moisture barriers to separate them from the humid external air. The moisture barriers should be thermally insulated to maintain them at a temperature above the dew point
- Use a quality paint system to provide protection against paint peeling and condensation soaking into plasterboard and compounds

External Applications:

Minimum conditions to use plasterboard in ceilings of balconies and under roof walkways:

- The plasterboard and components are not subjected to any direct water, long periods of high humidity or damp conditions
- Seal the plasterboard with suitable sealer before installation
- The plasterboard substrate is designed for the appropriate wind loading conditions
- The roof has cross ventilation above the plasterboard ceiling
- Related product is used to improve temperature control, reduce wind pressure and control ventilation

Exposure to High Humidity:

Rooms such as indoor swimming pools and communal showers are subject to long periods of high relative humidity “RH” (above 90%). The use of plasterboard in such areas is not recommended by Lafarge Gypsum

For rooms with intermittent periods of high humidity “RH”, Moisture Check MAY BE USED. In these rooms ventilation is required, to enable removal of excess moisture, via an open window or exhaust fan.

Exposure to Excessive heat:

Plasterboard is an ideal building material for normal ambient temperatures. It is not suited for long periods at elevated temperatures such as near fireplace flues or chimneys. Fire Check is no exception as it is designed to slow down a fire and not to resist constant elevated temperatures.

1.3 Storage, Delivery & Handling

General:

To reduce the possibility of damage, delivery to site should occur immediately just before installation and care should be taken not to damage edges. Once delivered (as in storage) plasterboard must be kept dry and should be stacked clear off the floor using supports (bearers) not more than 400/600 apart.

Exposure to excessive humidity during storage can result in plasterboard becoming damp and soft, causing it to appear defective. In this case the plasterboard should be allowed to dry out and evaluation for the use thereof will depend on the specific application. To help protect plasterboard from absorbing humidity:

- Avoid open sources of water such as wet floors
- Wrap the plasterboard with plastic overnight
- Provide ventilation
- Install soon after delivery
- Install during dry weather for best results.

Handling of Lafarge Plasterboard

- Lafarge Plasterboard should be stacked flat on bearers in a dry and level area to avoid ground dampness and should be elevated from the ground.
- Stack plasterboard and/ or timber bearers to required specifications.
- The maximum number of Lafarge Plasterboard for each stack is 80 sheets for 6.4mm board and 40 sheets for 9, 12 and 15mm thick boards.
- No more than 5 stacks should be piled on top of one another. The bearers between each stack must be aligned.
- Lafarge Plasterboard should be kept indoors and exposure to water and the weather must be avoided
- Lafarge Plasterboard should be carried on its edges in an upright position by two people, rather than flat. No more than 2 plasterboards should be carried at a time.

Cutting of Lafarge Plasterboard:

Lafarge Plasterboard can be cut using a sharp utility knife or a fine tooth saw. The board should be placed flat on a level surface with the face upwards. Mark the area to be cut with a chalk line or pencil. Place a straight edge next to the line and with a sharp utility knife score the face layer of paper. Slide the board over the edge of the level surface or stand it on edge and snap the core of the board, the back layer of paper can now be cut. A fine tooth saw may also be used to saw through the board. Sand all cut edges.

When required to cut an L shape out of a board, the one limb must be cut with a fine toothed saw and the other limb with a utility knife as described above.

Setting Out & Installation:

General

Identify all components as well as prefabricated components.
Plan, calculate and mark the layout of the partition.
Plan the required material quantities.

Lafarge Gypsum steel framing
Fix the track to the floor, cut as required, remembering to leave space for door openings.
Plumb upwards to correctly position and install the ceiling track or head/wall channel.
Alternately fix head channel to the ceiling and plumb downwards.
Insert the studs at spacing's of 600mm, twist the stud in place and friction will keep the stud in position. Remember to position studs for doors, glazing and corners.

Insert additional studs for corners and abutments.
Load bearing studs and suitable timber insert should be used to achieve the strength requirements of the framing assembly and adequately support the weight of the door.

Insulation
Fit securely with closed joints, leaving no gaps. Unless the insulation is self supporting, fix the insulation at head of frame using 25mm x 25mm galvanized angle.

Services
All services to be completed.

Install Lafarge Plasterboard
Establish a starting point.
When installing the first plaster board ensure that the first joint will be plumb (as the wall may not be plumb). Line up the studs as you proceed from here, remember the studs are spaced at 600mm centres.
Use small sections of plaster board during installation to keep plaster boards off the ground to prevent moisture from creeping up the plaster boards.
Fix plaster boards to steel frame work using 25mm drywall screws spaced at 220mm centres; fixings on plaster board joints to be staggered.

Vertical Joints
Lightly butt boards together.
Centre joints on studs. Ensure that the joints on opposite sides of studs are staggered. For double layer boarding, stagger the joints between layers.

Horizontal Joints
Lightly butt boards together.

Horizontal joints will not be permitted in walls less than or equal to 3600mm. In walls over 3600mm (exceeding the maximum available length of board), firstly agree on positions of joints where not specified and then provide horizontal framing to support the horizontal edges of boards. Ensure that the horizontal joints on opposite sides of studs are staggered. For double board lining, stagger joints between layers by at least 600mm. Provide horizontal framing to support the horizontal edges of the first layer of plaster board.

Environmental Control:

Acoustics
Refer to Lafarge Gypsum specifications.
Sound seal location, at junctions between drywall frame and adjoining structure. Sound seal to be provided as a continuous band to clean, dry, and dust free surfaces, leaving no gaps.
Seal any gaps and service penetrations.

Fire stopping
Seal any gaps and service penetrations, with an intumescent sealant, to prevent penetration of flame.

Accessories and Spacings:

Fixing Plaster board to Lafarge Gypsum metal Studs
Single layer, fix securely to all supports at 220mm centres using 25mm drywall screws
Double layer, (outer layer) fix securely to all supports at 220mm centres using 41mm drywall screws.
Stagger the drywall screws along plaster board butt joints.
Position the drywall screws not less than 13mm from cut edges and 10mm from bound edges of plaster board.

Bottom track needs to be anchored to the floor using at least a 6mm diameter Nylon nail in anchor to be embedded a minimum of 40mm into the concrete surface bed slab. The anchors should be fixed though the steel foottrack adjacent to where the studs are postitioned.

Deflection Heads
To be specified by the project structural engineer.

Specification
Installation to conform to detail as specified by Lafarge Gypsum and AAAMSA, SABISA General Specification for Drywall Partitions and Lightweight internal walls.

Drylining:
Drylining consisting of 12mm Lafarge Plasterboard fixed with Lafarge Finishing plaster to brick, block or masonry walls. Finishing plaster to be applied in vertical dabs of 75X250 at 300mm centres. Dabs are to be spaced at 600mm centres and continuous runs along top and bottom of wall. Plasterboard to be supported off the floor with a 12mm Plasterboard strip spacer. The Lafarge Plasterboard lining is to be firmly bedded onto the Finishing plaster dabs, and then straightened with a straight edge in both vertical and horizontal plains. Only full length boards are to be used. All vertical joints are to be lined up, joints between adjacent boards to be 1-2mm. Joints are to be reinforced with Fibatape, filled with Lafarge Jointing Plaster and finished off as per manufacturer's instructions.

1.4 Lafarge Plasterboard Finishing Guide

Surface Preparation:

Gypsum board surfaces to receive paint shall be properly prepared before paint can be applied. The proper level of gypsum board finish shall be specified and completed prior to painting. The selected level of finish will vary with the final decoration to be applied, location of the surface within the building, and type and angle of both natural and artificial lighting expected.

General Recommendations:

Specified products and techniques for painting gypsum board must be used to attain a quality level of finish on interior surfaces. A variety of factors in the painting process affect the creation of a pleasing finish. Recommendations of paint manufacturers vary greatly; therefore, specific recommendations of the manufacturer of the paint or other coating material shall be followed when those recommendations are more stringent than the general specifications provided here.

Jointing of Plaster board Tapered Edges:

NB:

1. Check board surface. Any repairs and/or joints wider than 5mm should be filled with Lafarge Jointing Plaster. Pull off any loose paper and re tape where core is exposed.
2. Apply self-adhesive Fibatape over the centre of the joint.
3. Apply the first layer of Lafarge Jointing Plaster to the joint using a trowel, allow it to set and then apply a second layer of Jointing Plaster.
4. Apply Fibatape to internal corner ensuring that the tape is evenly spaced wither side. Apply a coat of Lafarge Jointing Plaster to one side and allow it to set before applying the plaster to the other side.
5. On the external corner apply a layer of Lafarge Jointing Plaster to each side of the corner bead using a trowel. When set, apply another layer of jointing plaster to each side. Clean off the outside edges.
6. Screws can be flushed using a trowel. Apply a small amount of Lafarge Jointing Plaster over the screw head n one direction and wipe in a right angle direction. Apply 2nd coat in the same way, allowing setting in between coats.
7. A control joint is fitted between brickwork and drywall where they are in the same line or as an expansion joints on a long continuous drywall, e.g. walls longer than 10m should have a control joint every 5m. Note that a full height door frame acts as a control joints. Allow 1cm gap between plasterboard and brickwork. Butter this joint with Lafarge Jointing Plaster then press control joint firmly into position. Joint in normal manner.
8. When all final coats are set, sand lightly to a smooth level finish using a fine grit sand paper (80 / 100 grit). Do not over-sand.

NB: Remember to clean off all excess Lafarge Jointing Plaster and feather out.
Using a damp cloth remove all powder from the joint and surface of board prior to decoration.

DO NOT use oil or solvent based undercoats. Use any good quality paint for the finishing coat.

Checklist:

1. Make sure that the Lafarge Jointing Plaster is allowed to set thoroughly between coats.
2. Check that the screws and metal trims are completely covered with compound.
3. Check that all finished joints are smooth and dry for decoration.
4. Check surface generally for smoothness and possible unfinished work.

All correctly prepared gypsum board surfaces which are to be painted shall be primed with a minimum of one coat of a good quality drywall primer (or other material manufactured especially for the purpose) to equalize the absorption between the gypsum board face paper, joint compound, and skim coating materials.

A good quality primer shall be used as the first coat over gypsum board. The recommendation of the primer manufacturer shall be followed; however, the minimum dry film thickness of the primer shall be not less than 0.025mm.

The number of coats of finish paint and the total dry film thickness of the finish coat(s) depends upon the paint being used. The paint manufacturer's recommendations on total dry film thickness shall be followed. NOTE: The total dry film thicknesses recommended by some paint manufacturers may or may not include the primer thickness.

It is recommended to have no dilution of primer coat and also to initially apply paint onto board's first, with the second coat of paint onto joints. Also it is important to ensure the provision of adequate air circulation to properly dry the paint within the time frame specified by the paint manufacturer.

Typical Light Conditions & Finishing Levels:

Quality finishing of gypsum products or any constructed surface is paramount for protection (longevity), maintenance and of course aesthetic reasons, especially in public areas and/or highly visible areas. This is even more critical in environments that are well lit and ventilated.

Mixing and Coverage:

	Lafarge Skim Stone	Lafarge Skim Lite
Water/plaster mixing ratio	1 part water + 2 parts plaster	1 part water + 2 parts plaster
Working Time	60 to 90 minutes	45 to 60 mins
Setting Time	90 to 120 minutes	90 to 120 mins
Shelf-life	6 months	6 months
Packaging	33kg	40kg
Coverage ratio	1 - 3mm to 18m2, 5 - 6mm to 10m2 12 - 13mm to 3m2 (per 33kg bag)	1 - 3mm to 22m2, 5 - 6mm to12m2 12 - 13mm to 4m2 (per 40kg bag)

Prior to commencing with finishing works, it is important to determine and understand the correct finishing level (L) as numerically indicated in the table below:

Level	Joints	Interior Angles	Accessories	Fasteners	Surface
0	No taping, finishing or accessories required.				
This level of finish may be useful in temporary construction or whenever the final decoration has not been determined.					
1	Tape set in joint compound.	Tape set in joint compound.			Tool marks the ridges acceptable. Surface free of excess joint compound.
Frequently specified in plenum areas above ceilings, in attics, in areas where the assembly would generally be concealed, or in building service corridors and other areas not normally open to public view. Accessories optional at specifier discretion in corridors and other areas with pedestrian traffic. Some degree of sound and smoke control is provided. Where a fire-resistance rating is required for the gypsum board assembly, details of the construction shall be in accordance with reports of fire tests of assemblies that have met the fire-rating requirements.					
2	Tape embedded in joint compound and wiped with a joint knife, leaving a thin coat of compound over tape.	Tape embedded in joint compound and wiped with a joint knife, leaving a thin coat of compound over tape.	Shall be covered by one additional coat of joint compound.	Shall be covered by one additional coat of joint compound.	Surface shall be free of excess joint compound. Tool marks and ridges acceptable. Joint compound applied over the body of the tape at the time of tape embedment shall be considered a separate coat of joint compound and shall satisfy the conditions of this level.
Specified where water-resistant gypsum backing board is used as a substrate for tile. May also be specified in garages, warehouse storage or other similar areas where surface appearance is not of primary concern.					
3	Tape embedded in joint compound and one additional coat of jointing compound applied over joints.	Tape embedded in joint compound and one additional coat of jointing compound applied over joints.	Shall be covered by one additional coat of joint compound.	Shall be covered by one additional coat of joint compound.	Joint compound shall be smooth and free of tool marks and ridges. Note: It is recommended that the prepared surface be coated with a drywall primer prior to the application of final finishes. See painting and wall covering specifications.
Typically specified in appearance areas where lighting is favourable and light tone flat or low sheen paints are used before final painting, or where heavy-grade wall coverings are to be applied as the final decoration. Unbacked vinyl wall covering; deep tone paints are not recommended over this level of finish.					
4	Tape embedded in joint compound and one additional coat of jointing compound applied over joints.	Tape embedded in joint compound and one additional coat of jointing compound applied over joints.	Shall be covered by two separate coats of joint compound.	Shall be covered by two separate coats of joint compound.	Joint compound shall be smooth and free of tool marks and ridges. Note: It is recommended that the prepared surface be coated with a drywall primer prior to the application of final finishes. See painting and wall covering specifications.
This level should be specified where flat paints, light textures of wall covering are to be applied. In critical lighting areas, flat paints applied over light textures tend to reduce joint photographing. Gloss, semi-gloss, deep tone paints and enamel paints can be recommended over this level of finish. The weight, texture and sheen level of wall covering applied over this level of finish should be carefully evaluated. Joints and fasteners must be adequately concealed if the wall covering material is lightweight, contains limited pattern, has a gloss finish or any combination of these features is present.					
5	Tape embedded in joint compound and wiped with a joint knife, leaving a coat of compound over tape and taper.	Tape embedded in joint compound and wiped with a joint knife, leaving a coat of compound over tape and taper.	Shall be covered by one separate coat of joint compound.	Shall be covered by one separate coat of joint compound.	A skim coat of plaster compound, or a material manufactured especially for this purpose, shall be applied to the entire surface, the thickness to the manufacturer's specification. The surface shall be smooth and free of tool marks and ridges. Note: It is recommended that the prepared surface be coated with a drywall primer prior to the application of final finishes. See painting specification.
This level of finish is highly recommended where gloss, semi-gloss, enamel or non-textured flat paints are specified, or where severe lighting conditions occur. The highest quality finish is the most effective method to provide a uniform surface and minimize the possibility of joint photographing and of fasteners showing through the final decoration.					

Internal partition system

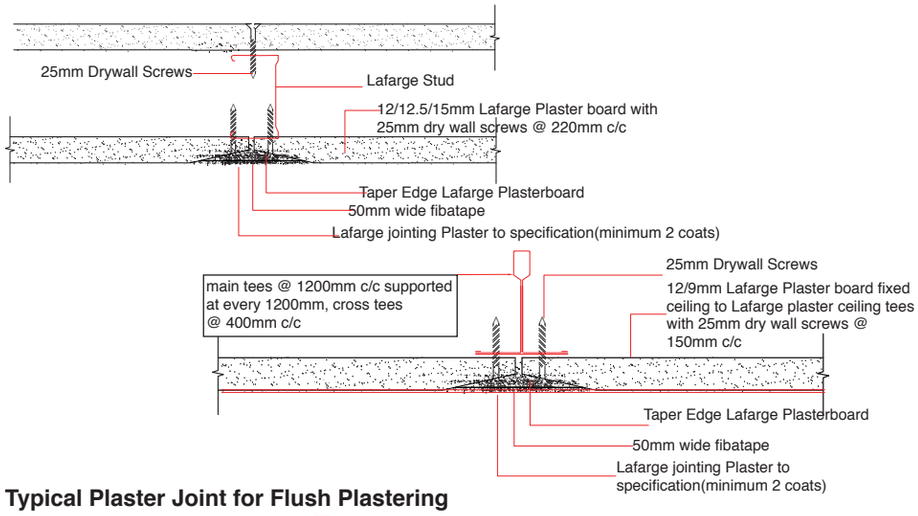
Lafarge Partition Systems are quick to erect with very high levels of fire and acoustic performance. A variety of different specification options achieve acoustic insulation standards up to 65dB and fire resistance up to 180 minutes. The partitions use metal studs with 12mm or 15mm Lafarge Plasterboard.

Components are light and easy to handle, quick and simple to install, and enable minimum wastage. Lafarge Gypsum's partitions are dimensionally accurate and will not bow, warp or shrink. Standard cut-outs in both studs and tracks accommodate mechanical and electrical services without the need for site-formed holes.

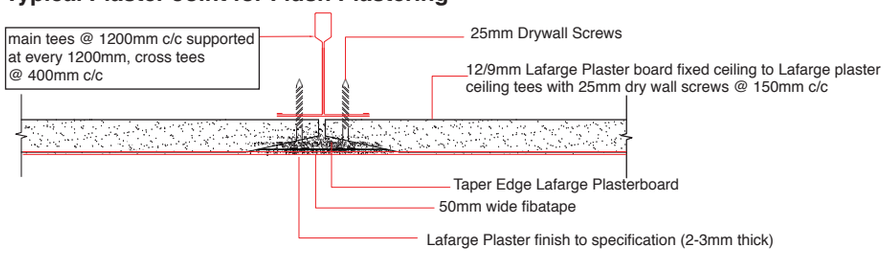
Plasterboard Jointing

Internal Partitioning System

Typical Plaster Joint Detail - Tape & Joint



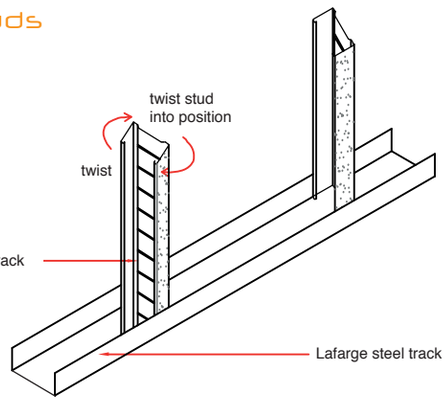
Typical Plaster Joint for Flush Plastering



Typical Locating of Studs

Internal Partitioning System

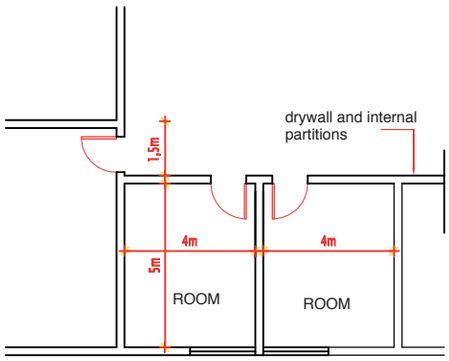
1. Drywall studs to be inserted into floor and ceiling track with a twist motion
2. Allow a 10mm clearance between top of stud and track
3. Erect studs at 400/600mm cts



Typical Partition Layout

Internal Partitioning System

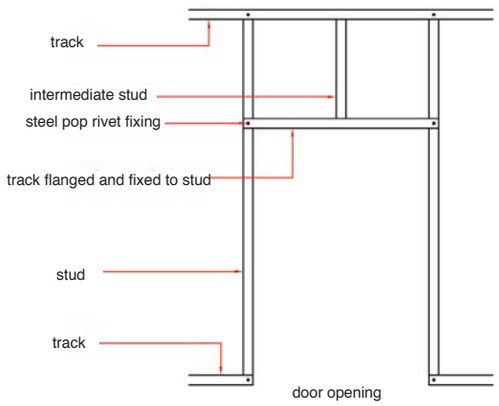
1. Set out as required, allowing openings on bottom track for door frames
2. Fix Lafarge track to floor
3. Fix Lafarge track to ceiling
4. or Fix head section as required
5. Position studs at 400/600 cts



Typical Stud Location at Door Openings

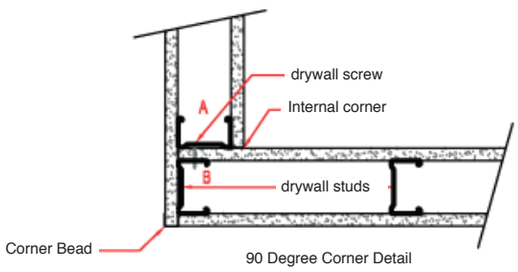
Internal Partitioning System

1. Door openings are constructed as per detail
2. Extra support in the form timber/steel tubing will be required when hanging solid doors
3. Check that the tracks are securely fixed @400/600 cts at ends
4. Check that the appropriate studs are secured
5. Check that all studs are properly spaced
6. Check all walls are level and plumb
7. Check all door frames and openings are properly fixed

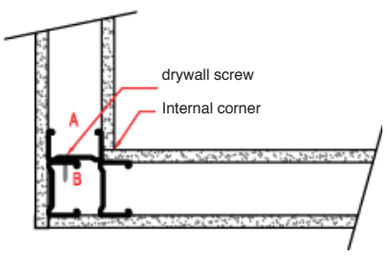


Door Detail

Typical Partition Corner Details



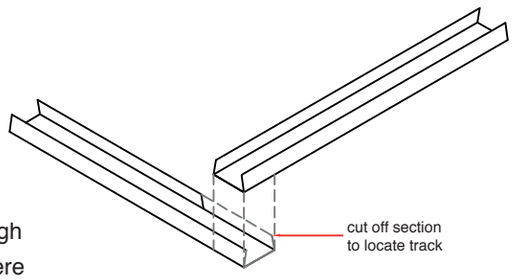
90 Degree Corner Detail



Typical Floor Track Location on Corners

Internal Partitioning System

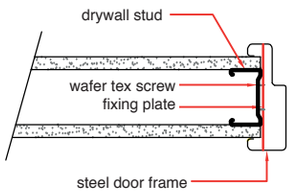
1. Floor track fixed as per detail
2. To anchor the bottom track, use a 6mm diameter Nylon nail in anchor a minimum of 40mm into a concrete surface bed slab. The anchors should be fixed through the steel foot track adjacent to where the studs are positioned.

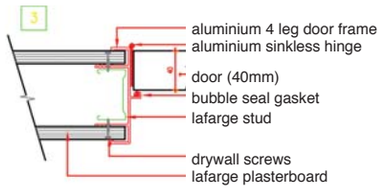


Typical Door Frame Details

Internal Partitioning System

1. Steel door frames are fixed by screwing drywall studs to fixing plate welded inside the steel door frame
2. Position the stud to allow for plaster board location on other side



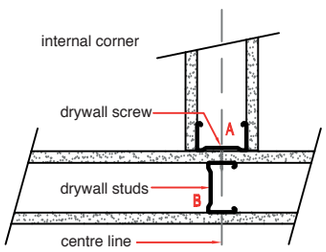


aluminium door frame detail

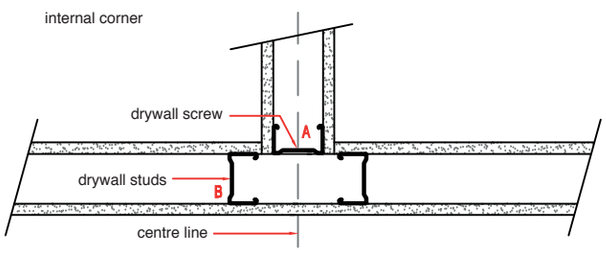
Typical "T" Junction Details

Internal Partitioning System

1. T-junction studs erected as per details allowing clearance between A and B for plasterboard
2. Alternate Option



1. T-Junction Detail



2. T-Junction Detail

Joints

Material= Lafarge Jointing Plaster and Fibatape.

Lightly sand cut edges of plaster boards to remove paper burrs. Cover all joints, gaps and internal angles with Lafarge fibatape, dress with Lafarge Jointing Plaster, for application of Lafarge Jointing Plaster please refer to manufacturer's specifications attached.

Full Skim

Material= Lafarge Skimstone, Lafarge Finishing Compound.

Lightly sand cut edges of plaster boards to remove paper burrs. Cover all joints, gaps with Lafarge fibatape, dress joints with Lafarge Jointing Plaster, apply skim coat to surface area's as required, for application of Jumbo Finishing Compound please refer to manufacturers specifications attached.

Corners

Material= Lafarge Gypsum metal corner bead.

Apply corner bead to corners by fixing with drywall screws.
Apply Jumbo Jointing Compound to external face. For application of Lafarge Jointing Plaster please refer to manufacturer's specification.

"Follow the instructions as supplied by the paint manufacturers to ensure a quality paint finish and durability."

Lafarge Fixed Partition Systems

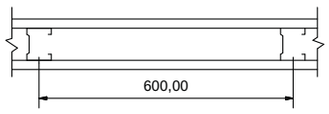
Lafarge Fixed Partition Systems

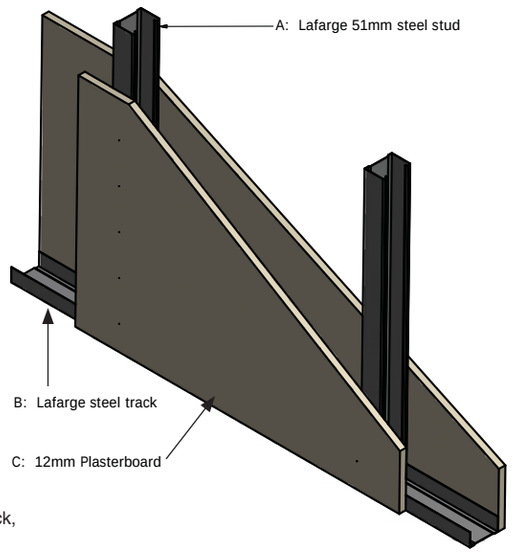
Standard Specifications for Drywall Systems up to 3600mm

LPS51-0/1
Lafarge Gypsum Drywall Internal Partition System

Non-load bearing drywall system
12mm Standard Plasterboard - one layer each side

APPLICATION: Commercial





WALL PROPERTIES
51mm stud

Sound insulation reduction index	36dB
Thickness	76mm
Approximate weight	20kg/m2

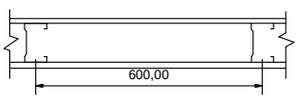
Material Used
A: 51mm Drywall steel stud
B: 52mm Drywall steel track
C: 12mm Standard Tapered edge Plaster Board
25mm Drywall Screws
Lafarge Drywall jointing system
Floor and ceiling finishes as per specification

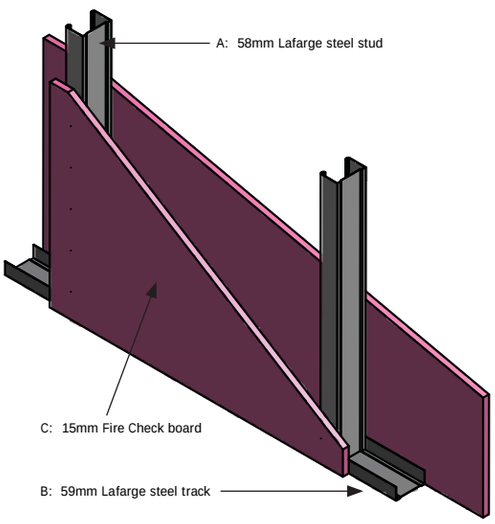
APPLICATION DETAIL
1. Set Lafarge steel studs spaced at 600mm c/c into steel track at floor and ceiling
2. Apply a single layer of 12mm Lafarge Taper edge plasterboard to each side using 25mm drywall screws spaced at 220mm c/c
3. Tape and joint according to specification
4. Refer to standard specification
5. Accoustic performance requires sealing between track, floor, ceiling and any other abutment joints
6. Stagger the plasterboard joints in the system

LPF 58-0/1
Lafarge Gypsum Drywall

Non-load bearing drywall system
15mm Technical Fire Check Plasterboard - one layer each side

APPLICATION: Commercial & Residential





WALL PROPERTIES
58mm stud

Sound insulation reduction index	40dB
Thickness	88mm
Approximate weight	23kg/m2

Material Used
A: 58mm Drywall steel stud
B: 59mm Drywall steel track
C: 15mm Standard Tapered edge Plaster Board
25mm Drywall Screws
Lafarge Drywall jointing system
Floor and ceiling finishes as per specification

APPLICATION DETAIL
1. Set Lafarge steel studs spaced at 600mm c/c into steel at floor and ceiling
2. Apply a single layer of 15mm Fire Check Taper edge plasterboard to each side using 25mm drywall screws spaced at 220mm c/c
3. Tape and joint according to specification
4. Refer to standard specification
5. Accoustic performance requires sealing between track, floor, ceiling and any other abutment joints
6. Stagger the plasterboard joints in the system

LPS64-0/1

Lafarge Gypsum Drywall
INTERNAL PARTITION SYSTEM

Non-load bearing drywall system
15mm Standard Plasterboard - one layer each side

APPLICATION: Commercial and Residential

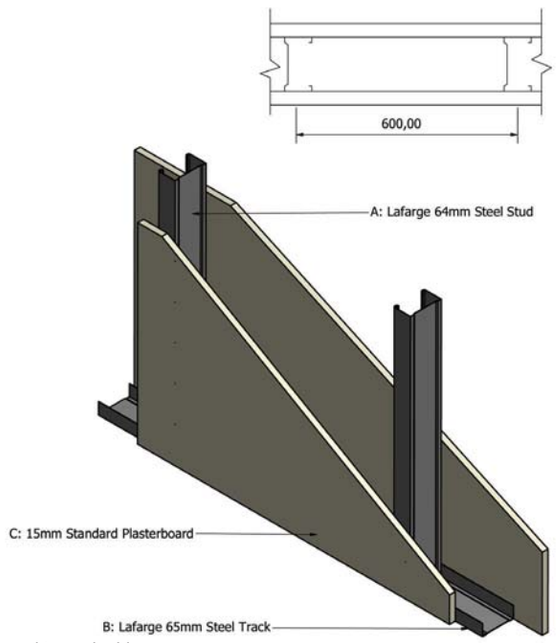
WALL PROPERTIES

64mm stud

Sound insulation reduction index	40dB
Thickness	94mm
Approximate weight	23kg/m2

Material Used

A: 64mm Drywall steel stud
B: 65mm Drywall steel track
C: 15mm Standard Plasterboard
25mm Drywall Screws
Lafarge Drywall jointing system
Floor and ceiling finishes as per specification



APPLICATION DETAIL

1. Set Lafarge steel studs spaced at 600mm c/c into steel track at floor and ceiling
2. Apply a single layer of 15mm standard plasterboard to each side side using 25mm drywall screws spaced at 220mm c/c
3. Tape and joint according to specification
4. Refer to standard specification
5. Accoustic performance requires sealing between track, floor, ceiling and any other abutment joints
6. Stagger the plasterboard joints in the system

LPF64-30/1

Lafarge Gypsum Drywall
30min FIRE RATED INTERNAL PARTITION SYSTEM

Non-load bearing drywall system
12mm Standard Plasterboard - one layer each side

APPLICATION: Commercial and Residential

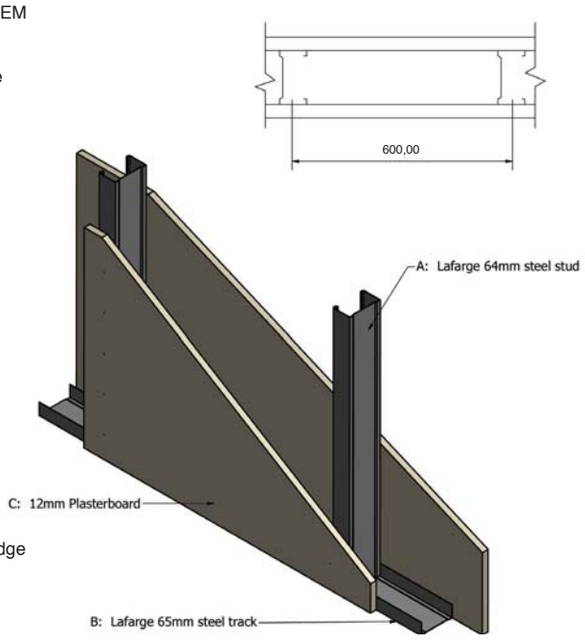
WALL PROPERTIES

64mm stud
30min Fire Rating

Sound insulation reduction index	38dB
Thickness	89mm
Approximate weight	21kg/m2

Material Used

A: 64mm Drywall steel stud
B: 65mm Drywall steel track
C: 12mm Standard Tapered edge Plaster Board
25mm Drywall Screws
Lafarge Drywall jointing system
Floor and ceiling finishes as per specification



APPLICATION DETAIL

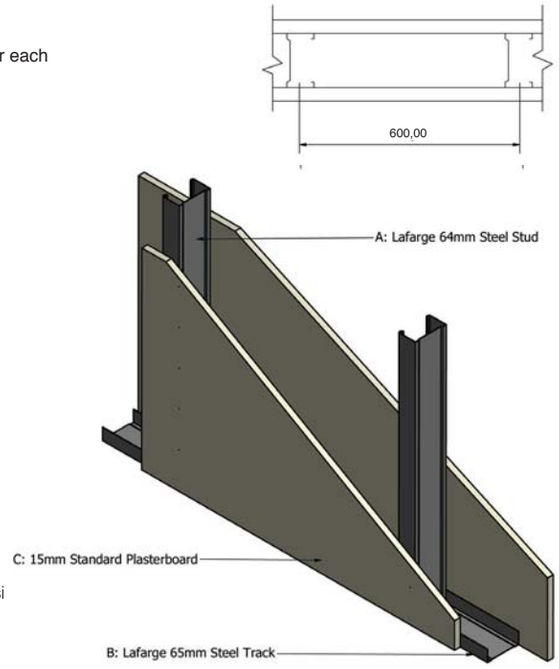
1. Set Lafarge steel studs spaced at 600mm c/c into steel track at floor and ceiling
2. Apply a single layer of 12mm Lafarge Taper edge plasterboard to each side using 25mm drywall screws spaced at 220mm c/c
3. Tape and joint according to specification
4. Refer to standard specification
5. Accoustic performance requires sealing between track, floor, ceiling and any other abutment joints
6. Stagger the plasterboard joints in the system

LPF64-60/1

LAFARGE GYPSUM DRYWALL
60min FIRE RATED INTERNAL PARTITIONING SYSTEM

Non-load bearing drywall system
15mm Technical Fire Check Plasterboard - one layer each side

APPLICATION: Commercial & Residential



WALL PROPERTIES

64mm stud
60min Fire Rating

Sound insulation reduction index	40dB
Thickness	94mm
Approximate weight	23kg/m2

Material Used

A: 64mm Drywall steel stud
B: 65mm Drywall steel track
C: 15mm Standard Tapered edge Plaster Board
25mm Drywall Screws
Lafarge Drywall jointing system
Floor and ceiling finishes as per specification

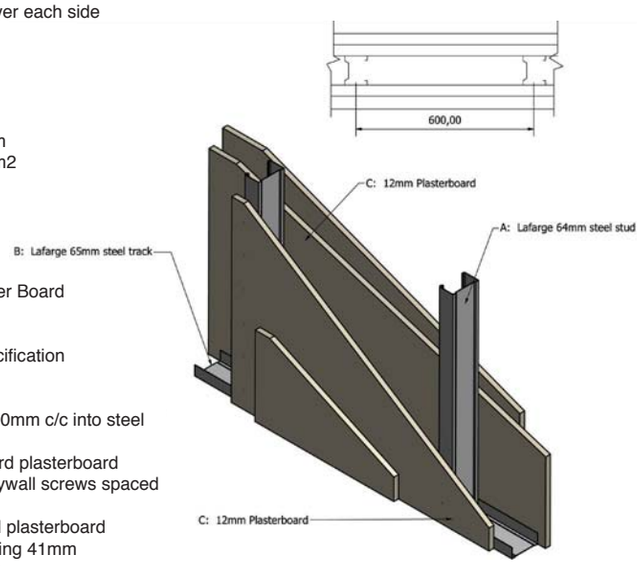
APPLICATION DETAIL

1. Set Lafarge steel studs spaced at 600mm c/c into steel at floor and ceiling
2. Apply a single layer of 15mm Fire Check Taper edge plasterboard to each side usi 25mm drywall screws spaced at 220mm c/c
3. Tape and joint according to specification
4. Refer to standard specification
5. Accoustic performance requires sealing between track, floor, ceiling and any other abutment joints
6. Stagger the plasterboard joints in the system

LPF64-60/2

LAFARGE GYPSUM DRYWALL
60min FIRE RATED INTERNAL PARTITION SYSTEM

Non-load bearing drywall system
12mm Standard Plasterboard - double layer each side



WALL PROPERTIES

64mm stud
60min Fire Rating

Sound insulation reduction index	45dB
Thickness	112mm
Approximate weight	39kg/m2

Material Used

A: 64mm Drywall steel stud
B: 65mm Drywall steel track
C: 12mm Standard Tapered edge Plaster Board
25mm and 41mm Drywall Screws
Lafarge Drywall jointing system
Floor and ceiling finishes as per specification

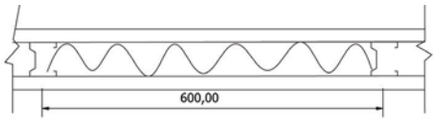
APPLICATION DETAIL

1. Set Lafarge steel studs spaced at 600mm c/c into steel track at floor and ceiling
2. Apply a single layer of 12mm standard plasterboard vertical to both sides using 25mm drywall screws spaced at 220mm c/c stagger joints
3. Apply a face layer of 12mm standard plasterboard to both sides staggering all joints, using 41mm drywall screws spaced at 220mm c/c
4. Tape and joint according to specification
5. Refer to standard specification
5. Accoustic performance requires sealing between track, floor, ceiling and any other abutment joints
6. Stagger the plasterboard joints in the system

LPF64-60/3

LAFARGE GYPSUM DRYWALL
60min FIRE RATED INTERNAL PARTITIONING SYSTEM

Non-load bearing drywall system
12.5mm Technical Fire Check Plasterboard - one layer each side 80kg/m3 insulmatt wire mesh surface Fibre blanket



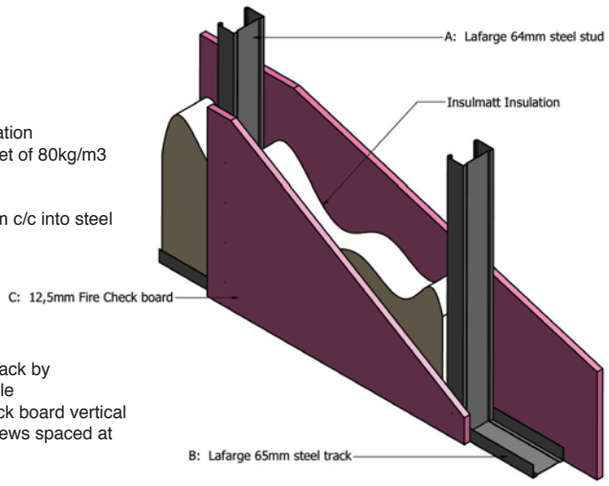
WALL PROPERTIES

64mm stud
60min Fire Rating

Sound insulation reduction index	49dB
Thickness	89mm
Approximate weight	30kg/m2

Material Used

A: 64mm Drywall steel stud
B: 65mm Drywall steel track
C: 12.5mm Fire Check board
25mm Drywall Screws
Lafarge Drywall jointing system
Floor and ceiling finishes as per specification
Insulmatt wire mesh surfaced fibre blanket of 80kg/m3



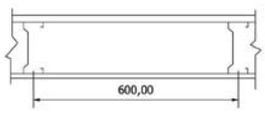
APPLICATION DETAIL

1. Set Lafarge steel studs spaced at 600mm c/c into steel at floor and ceiling
2. Apply a single layer of 12.5mm Fire Check board vertical to one side using 25mm drywall screws spaced at 220mm c/c
3. Position Insulmatt insulation between studs, fold the top over and secure top track by positioning and fixing the galvanised angle
4. Apply a single layer of 12.5mm Fire Check board vertical to the other side using 25mm drywall screws spaced at 220mm c/c
5. Tape and joint according to specification
6. Refer to standard specification
7. Accoustic performance requires sealing between track, floor, ceiling and any other abutment joints
8. Stagger the plasterboard joints in the system

LPF102-60/1

LAFARGE GYPSUM DRYWALL
60min FIRE RATED INTERNAL PARTITION SYSTEM

Non-load bearing drywall system
15mm Technical Fire Check Plasterboard - one layer each side



APPLICATION: Residential

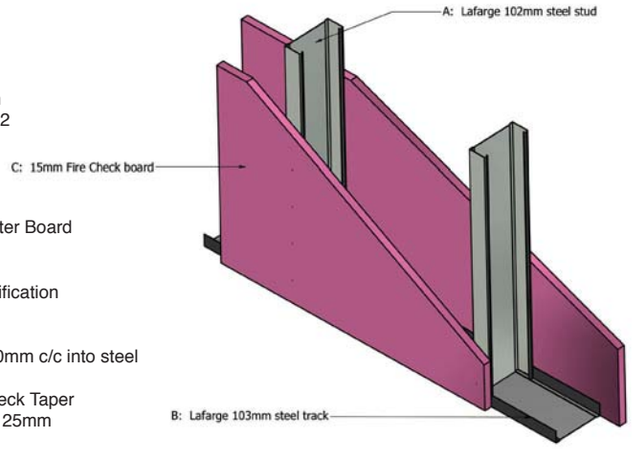
WALL PROPERTIES

102mm stud
60min Fire Rating

Sound insulation reduction index	40dB
Thickness	132mm
Approximate weight	24kg/m2

Material Used

A: 102mm Drywall steel stud
B: 103mm Drywall steel track
C: 15mm Fire Check Tapered edge Plaster Board
25mm Drywall Screws
Lafarge Drywall jointing system
Floor and ceiling finishes as per specification



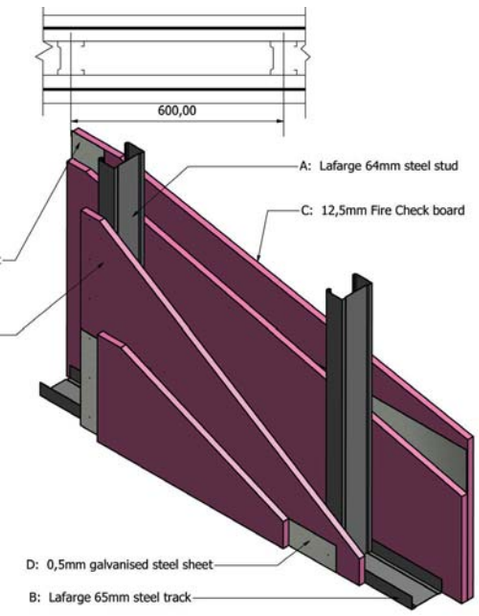
APPLICATION DETAIL

1. Set Lafarge steel studs spaced at 600mm c/c into steel track at floor and ceiling
2. Apply a single layer of 15mm Fire Check Taper edge plasterboard to each side using 25mm drywall screws spaced at 220mm c/c stagger joints
3. Tape and joint according to specification
4. Refer to standard specification
5. Accoustic performance requires sealing between track, floor, ceiling and any other abutment joints
6. Stagger the plasterboard joints in the system

LPF64-120/1

LAFARGE GYPSUM DRYWALL
120min FIRE RATED INTERNAL PARTITIONING SYSTEM

Non-load bearing drywall system
12.5mm Technical Fire Check Plasterboard - 0.5mm galvanised steel between double layer of Technical Check Plasterboard on each side



WALL PROPERTIES

64mm stud
120min Fire Rating

Sound insulation reduction index	48dB
Thickness	115mm
Approximate weight	50kg/m2

Material Used

A: 64mm Drywall steel stud
B: 65mm Drywall steel track
C: 12.5mm Technical Fire Check board
D: 0.5mm galvanised steel sheet
25mm and 41mm Drywall Screws
Lafarge Drywall jointing system
Floor and ceiling finishes as per specification

APPLICATION DETAIL

1. Set Lafarge steel studs spaced at 600mm c/c into steel at floor and ceiling
2. Apply a single layer of 12.5mm Fire Check plasterboard vertical to one side using 25mm drywall screws spaced at 220mm c/c
3. Apply 0.5mm galvanised steel sheet to each side (min. 30mm overlap)
4. Apply a face layer of 12.5mm taper edge fire check plasterboard to both sides
5. Tape and joint according to specification
6. Refer to standard specification
7. Accoustic performance requires sealing between track, floor, ceiling and any other abutment joints
8. Stagger the plasterboard joints in the system

LPF64-120/2

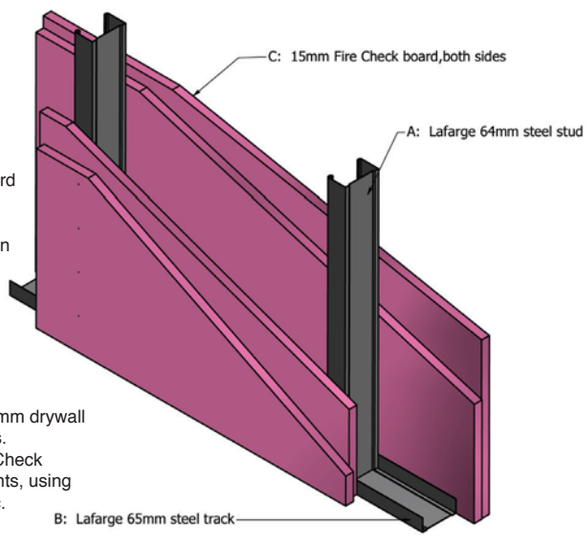
LAFARGE GYPSUM DRYWALL
120min FIRE RATED INTERNAL PARTITIONING SYSTEM

Non-load bearing drywall system
15mm Technical Fire Check Plasterboard - double layer each side

WALL PROPERTIES

64mm stud
120min Fire Rating

Sound reduction index	55dB
Thickness	124mm
Approximate weight	54kg/m2

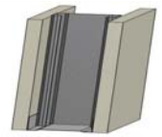
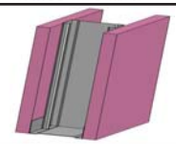
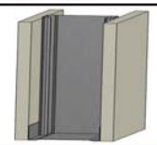
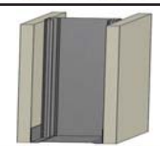
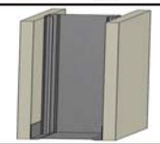


Material Used

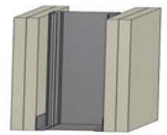
A: 64mm Drywall steel stud
B: 65mm Drywall steel track
C: 15mm Fire Check tapered edge plaster board
25mm and 41mm Drywall Screws
Lafarge Drywall jointing system
Floor and ceiling finishes as per specification

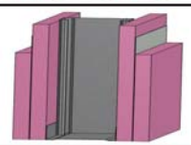
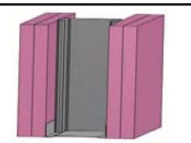
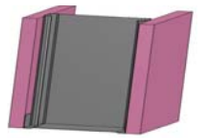
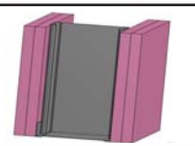
APPLICATION DETAIL

1. Set Lafarge steel studs spaced at 600mm c/c into steel track at floor and ceiling.
2. Apply a single layer of 15mm Technical Fire Check plasterboard vertical to both sides using 25mm drywall screws spaced at 220mm c/c, stagger joints.
3. Apply a face layer of 15mm Technical Fire Check plasterboard to both sides staggering all joints, using 41mm drywall screws spaced at 220mm c/c.
4. Tape and joint according to specification.
5. Refer to standard specification.
6. Accoustic performance requires sealing between track, floor, ceiling and any other abutment joints.
7. Stagger the plasterboard joints in the system
8. Maximum partition height 4,5m

LFG partition system	Key Features/ drawing?	Sound Reduction (dB (Rw))	Fire Resistance (min)	Partition Width (mm)	Approximate Weight (Kg/m²)	Height (m)	Segment/s
LPS 51 - 0/1 Non load bearing drywall system, 12mm Standard Plasterboard - one layer each side. Steel studs spaced at 600mm c/c. drywall screws spaced at 220mm c/c		36 dB	0	76	20	3.6	Commercial
LPF 58 - 0/1 Non load bearing drywall system, 15mm Technical Fire Check Plasterboard - one layer each side. Steel studs spaced at 600mm c/c. drywall screws spaced at 220mm c/c		40 dB	60	88	23	3.6	Commercial
LPS 64 - 0/1 Non load bearing drywall system, 15mm Standard Plasterboard - one layer each side. Steel studs spaced at 600mm c/c. drywall screws spaced at 220mm c/c		40 dB	0	94	23	3.6	Commercial Residential
LFS 64 - 30/1 Non load bearing drywall system, 12mm Standard Plasterboard - one layer each side. Steel studs spaced at 600mm c/c. drywall screws spaced at 220mm c/c		38 dB	30	89	21	3.6	Commercial Residential
LPF 64 - 30/1 (4,2) Non load bearing drywall system, 12mm Standard Plasterboard - one layer each side. Steel studs spaced at 400mm c/c. drywall screws spaced at 220mm c/c		38 dB	30		21	4.2	Commercial Residential

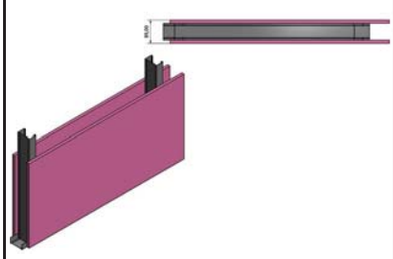
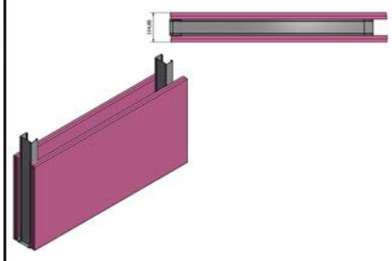
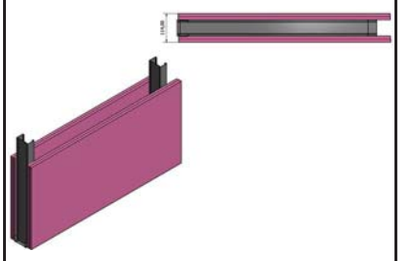
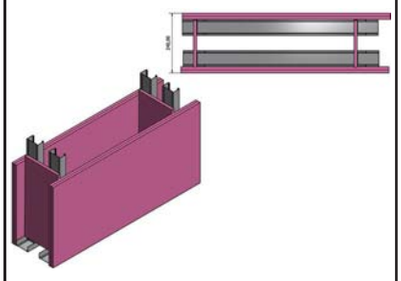
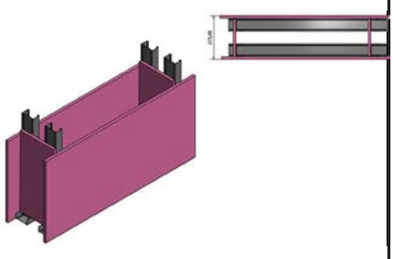
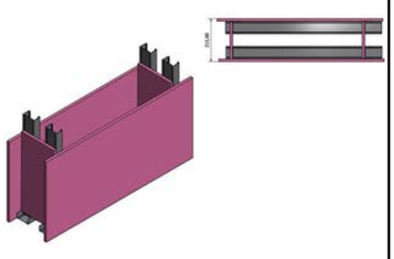
Lafarge Fixed Partition Systems

LFG partition system	Key Features/ drawing?	Sound Reduction (dB (Rw))	Fire Resistance (min)	Partition Width (mm)	Approximate Weight (Kg/m²)	Height (m)	Segment/s
LPF 64 - 60/1 Non load bearing drywall system 15mm Technical Fire Check Plasterboard - one layer each side. steel studs spaced at 600mm c/c. drywall screws spaced at 220mm c/c		40 dB	60	94	23	3.6	Commercial Residential
LPF 64 - 60/2 Non load bearing drywall system, 12mm Standard Plasterboard - double layer each side, staggered joints. Steel studs spaced at 600mm c/c. drywall screws spaced at 220mm c/c		45 dB	60	112	39	3.6	Commercial Residential
LPF 64 - 60/3 Non load bearing drywall system 12,5mm Technical Fire Check Plasterboard- one layer each side U Thermo Matt wire mesh surface Fibre blanket. steel studs spaced at 600mm c/c. drywall screws spaced at 220mm c/c		49 dB	60	89	30	3.6	Commercial Residential

LFG partition system	Key Features/ drawing?	Sound Reduction (dB (Rw))	Fire Resistance (min)	Partition Width (mm)	Approximate Weight (Kg/m²)	Height (m)	Segment/s
LPF 64 -120/1 Non load bearing drywall system 12,5mm Technical Fire Check Plasterboard- 0,5mm galvanized steel between Double layer of Technical Fire Check Plasterboard on each side. steel studs spaced at 600mm c/c. drywall screws spaced at 220mm c/c		48 dB	120	115	50	3.6	Commercial
LPF 64 - 120/1 (4,2) Non load bearing drywall system, 12,5mm Technical Fire Check Plasterboard - 0,5mm galvanized steel between Double layer of Technical Fire Check Plasterboard on each side. Steel studs spaced at 400mm c/c. drywall screws spaced at 220mm c/c		48 dB	120	115	50	4.2	Commercial
LPF 64 - 120/2 Non load bearing drywall system, 15mm Technical Fire Check Plasterboard - double layer each side. Steel studs spaced at 600mm c/c. drywall screws spaced at 220mm c/c		55 dB	120	124	54	3.6	Commercial
LPF 102 - 60/1 Non load bearing drywall system, 15mm Technical Fire Check Plasterboard - one layer each side. Steel studs spaced at 600mm c/c. drywall screws spaced at 220mm c/c		40 dB	60	132	24	3.6	Residential
LPF 102 - 120/1 Non load bearing drywall system, 15mm Technical Fire Check Plasterboard - Double layers each side. Steel studs spaced at 600mm c/c. drywall screws spaced at 220mm c/c		50 dB	120	162	46.5	3.6	Residential

Plasterboard Partition from 3600mm to 8000mm in height

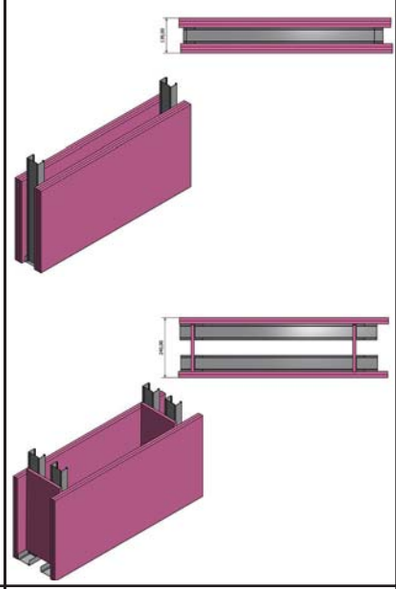
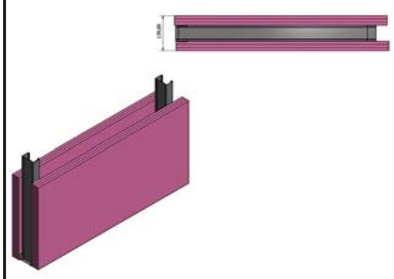
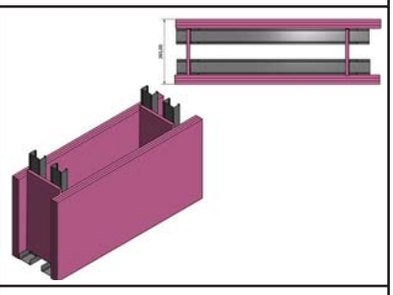
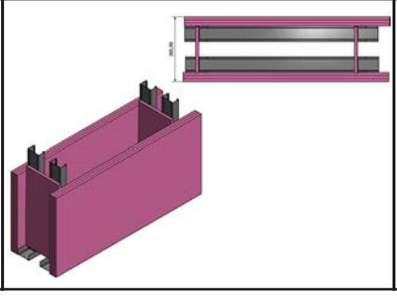
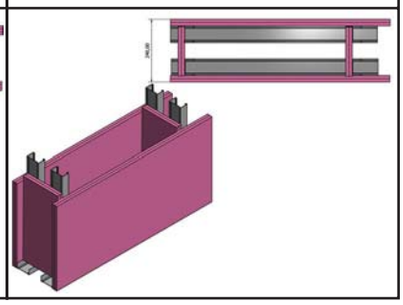
MAXIMUM PARTITION HEIGHTS

	30 Minutes	60 Minutes
4500mm		
5500mm		
6000mm		
6500mm		
8000mm		

- Fire Check - All Joints to be staggered
- All drywall screws spaced at maximum c/c
- All fixings according to manufacturer's specifications
- All metal studs to be 64mm
- For internal application with max, deflection 1/150
- Maximum stud spacing 400mm throughout
- All boards to be 12,5mm Fire Check plasterboard stagger joints.

Plasterboard Partition from 3600mm to 8000mm in height

MAXIMUM PARTITION HEIGHTS

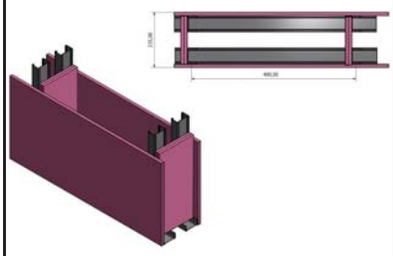
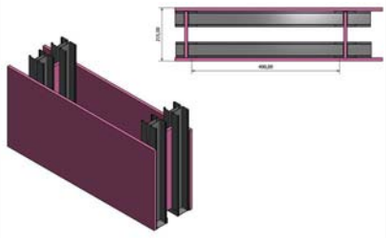
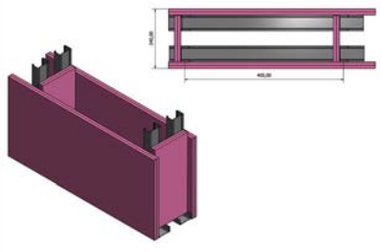
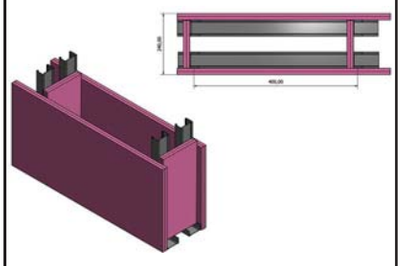
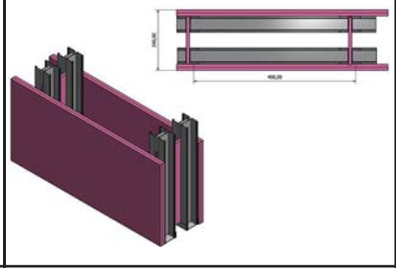
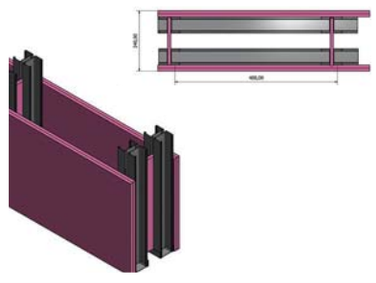
	90 Minutes	120 Minutes
4500mm		
5500mm		
6000mm		
6500mm		
8000mm		

- Fire Check - All Joints to be staggered
- All drywall screws spaced at maximum c/c
- All fixings according to manufacturer's specifications
- All metal studs to be 64mm
- For internal application with max, deflection 1/150
- Maximum stud spacing 400mm throughout
- All boards to be 12,5mm Fire Check plasterboard stagger joints.

Lafarge Fixed Partition Systems

Plasterboard Partition over 8000mm in height

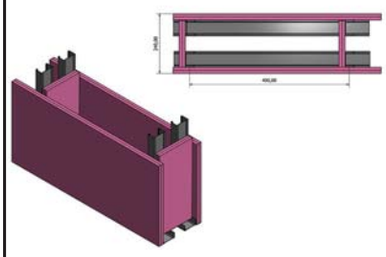
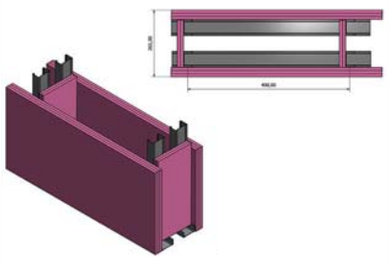
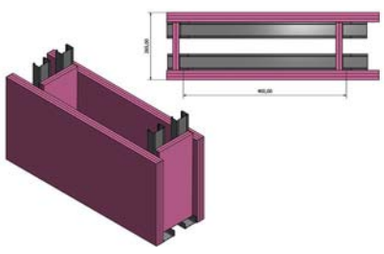
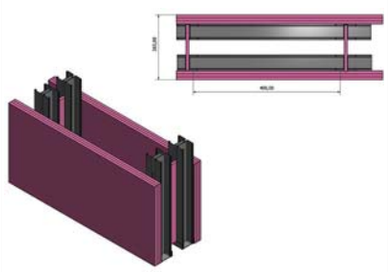
MAXIMUM PARTITION HEIGHTS

	30 Minutes	60 Minutes
8100mm		
9000mm		
9500mm		
10700mm		
12500mm		

- Fire Check - All Joints to be staggered
- All drywall screws spaced at maximum c/c
- All fixings according to manufacturer's specifications
- All metal studs to be 64mm
- For internal application with max, deflection 1/150
- Maximum stud spacing 400mm throughout
- All boards to be 12,5mm Fire Check plasterboard stagger joints.

Plasterboard Partition over 8000mm in height

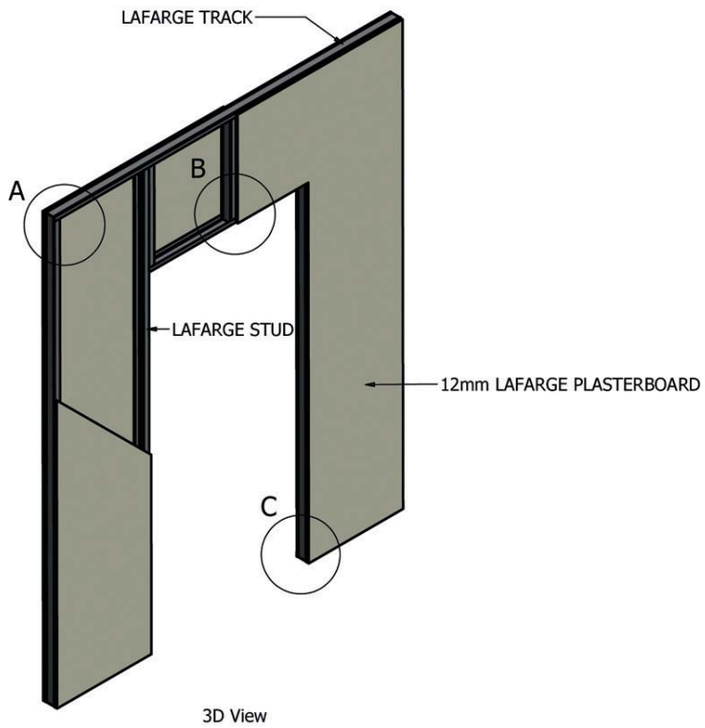
MAXIMUM PARTITION HEIGHTS

	90 Minutes	120 Minutes
8100mm		
9000mm		
9500mm		
10700mm		
12500mm		

- Fire Check - All Joints to be staggered
- All drywall screws spaced at maximum c/c
- All fixings according to manufacturer's specifications
- All metal studs to be 64mm
- For internal application with max, deflection 1/150
- Maximum stud spacing 400mm throughout
- All boards to be 12,5mm Fire Check plasterboard stagger joints.

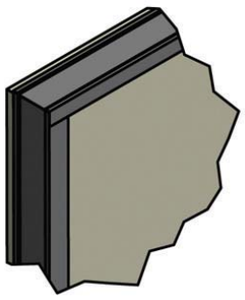
Lafarge Fixed Partition Systems

Lafarge 89mm Partition System
3D Door Detail

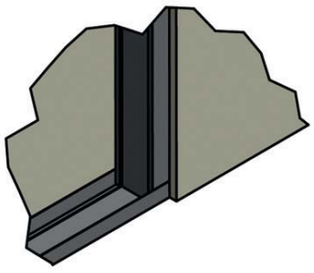


3D View

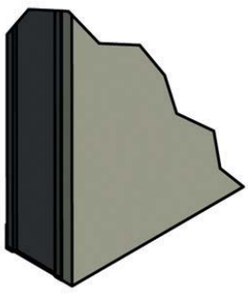
Detail A

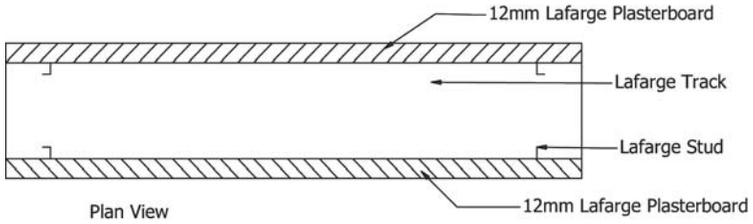


Detail B



Detail C

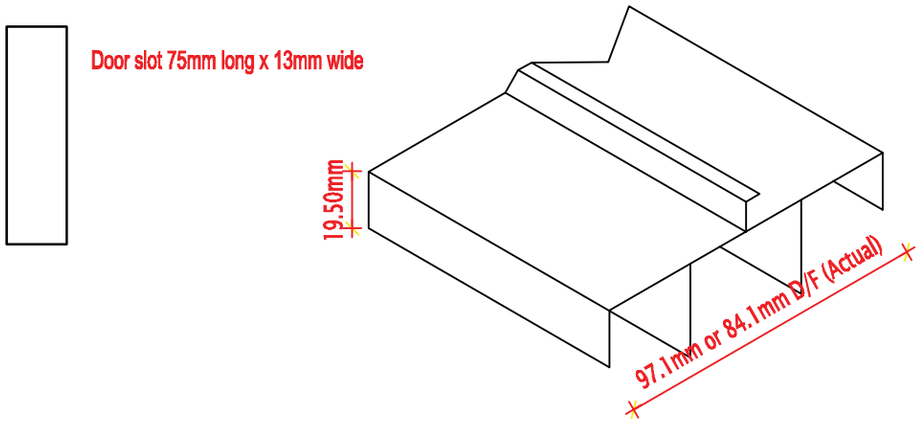


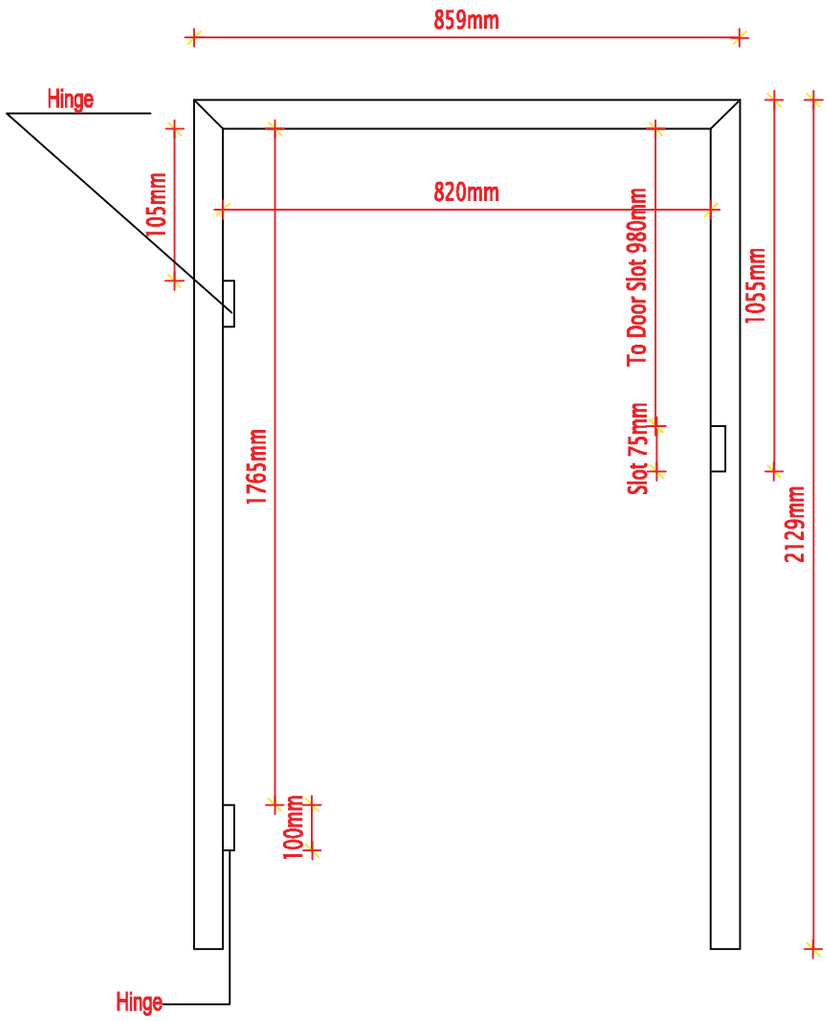


Plan View

Lafarge Door Frame Kit

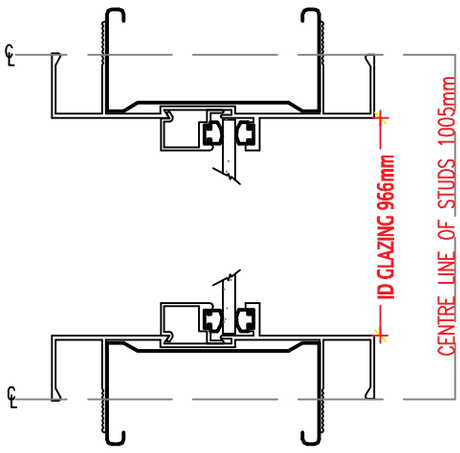
1. ID Width 820mm ±1.0mm
2. Leg styles final length to be cut on site to suit floor level
3. Dimensions tolerances 0.50mm
4. Material thickness 1.20mm
5. All section lengths have a tolerance of ±1.0mm
6. Door slot against inner leg



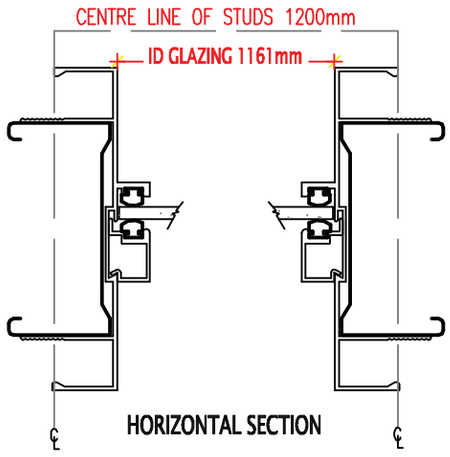


Lafarge Fixed Partition Systems

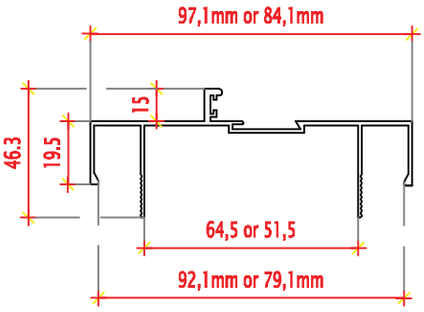
Lafarge Window Frame Kit



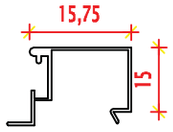
VERTICAL SECTION



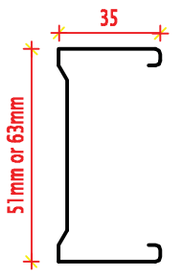
HORIZONTAL SECTION



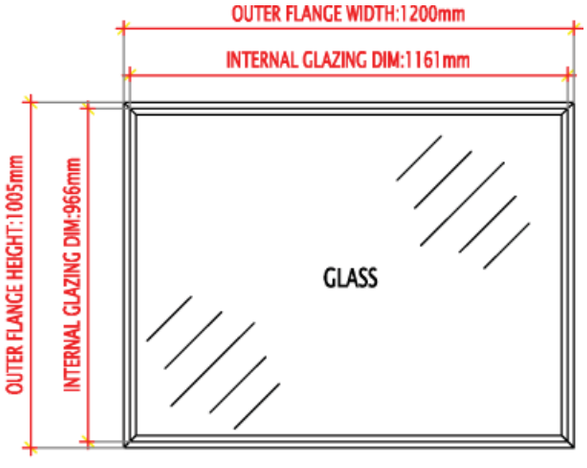
DRYWALL GLAZING
EXTENDED LEG SECTION



ALUMINIUM GLAZING BEAD



DRYWALL STUD



MACLOK GLAZING MODULE

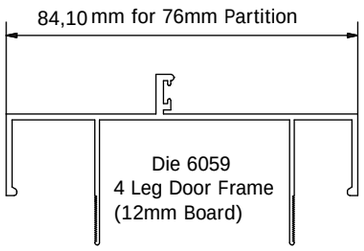
Lafarge Fixed Partition Aluminium Trim Accessories

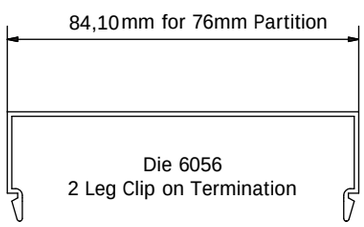
76mm Lafarge Fixed Partition System (12/12.5mm Plasterboard)

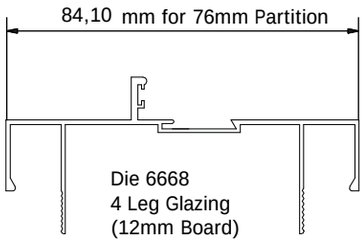
The lightweight non-demountable partition system consists of Male and Female Aluminium extrusions.

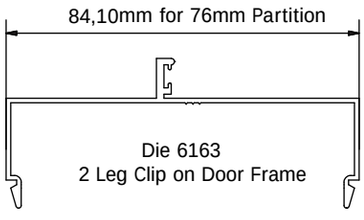
- Female sections support and position the Lafarge Plasterboard, as in conventional drywalling.
- Male sections are clip fixed to the Female sections to form Glazing Mullions and Transoms, Doorframe to Glazing details, and to facilitate full height Glazing and full height doors. Bubble Seal Gasket (which is used for both Doorframe and Glazing sections) is to be inserted before constructing the frames.

Female Aluminium Sections

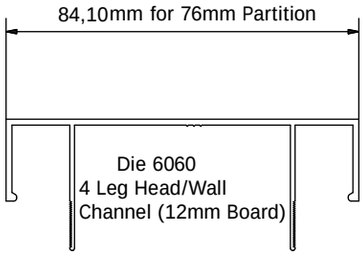


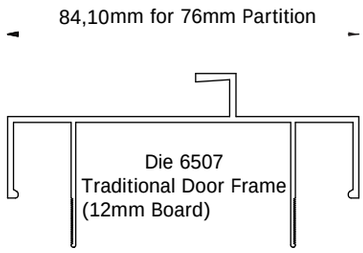


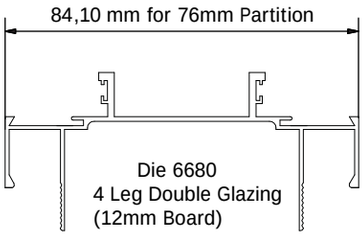


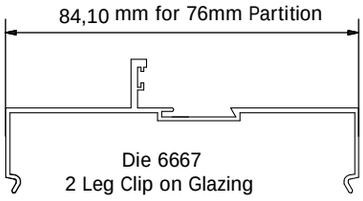


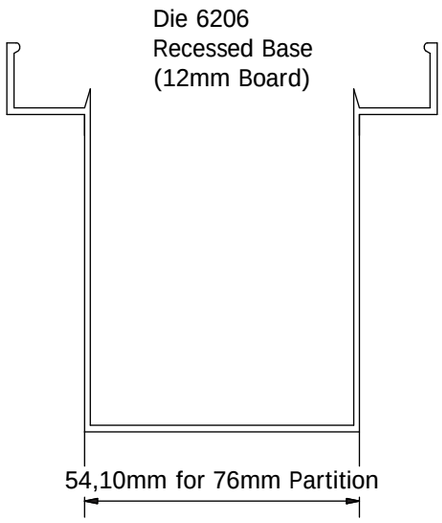
Male Aluminium Sections

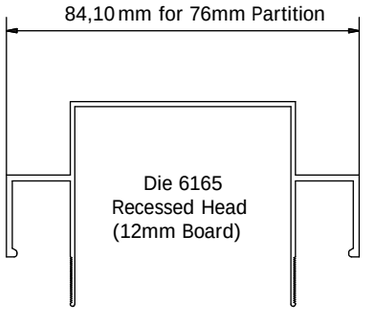


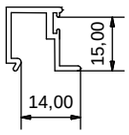










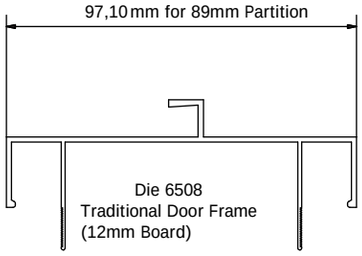


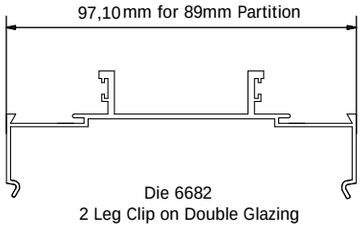
Die 6674
Aluminium Glazing

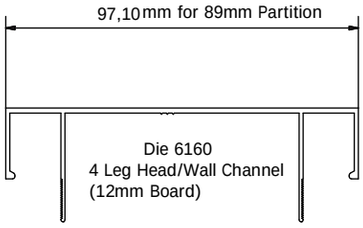
Lafarge Fixed Partition Aluminium Trim Accessories continued

89mm Lafarge Fixed Partition System (12/12.5mm Plaster Board)

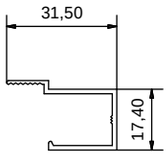
Female Aluminium Sections



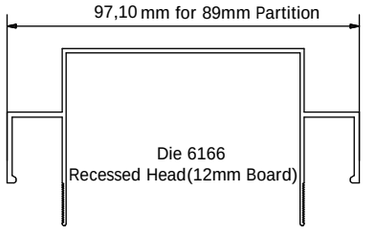


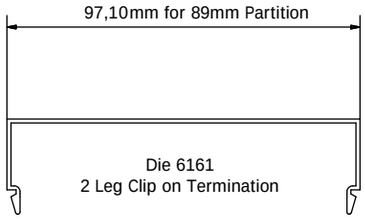


Male Aluminium Sections

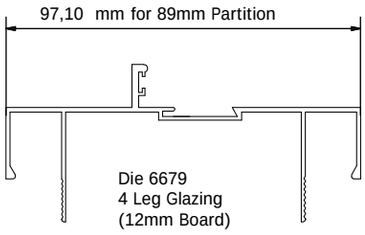


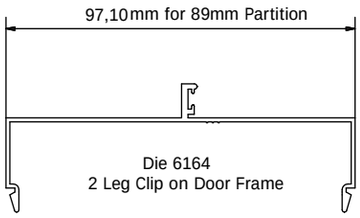
Die 6638 12mm Plasterboard Trim

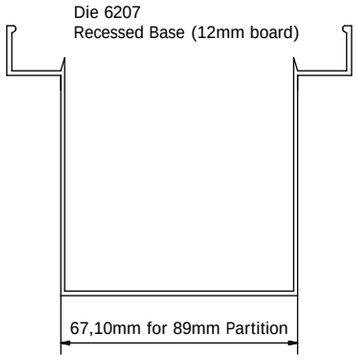


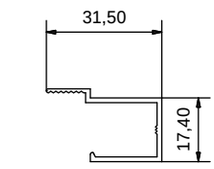


Female Aluminium Sections



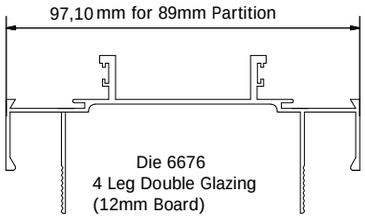


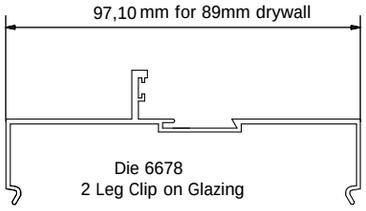


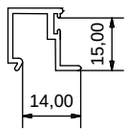


Die 6638 12mm Plasterboard Trim

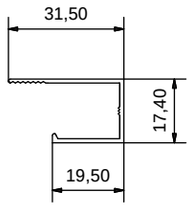
Male Aluminium Sections







Die 6674
Aluminium Glazing

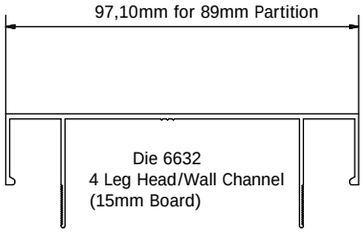


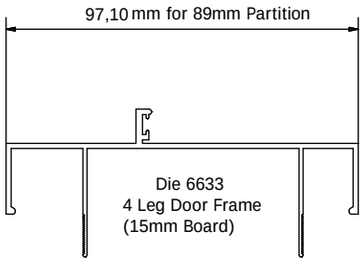
Die 6304

Lafarge Fixed Partition Aluminium Trim Accessories continued

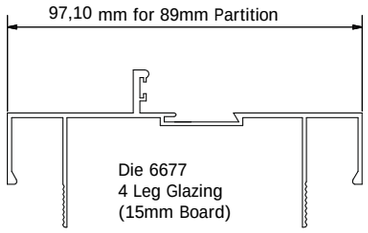
89mm Lafarge Fixed Partition System (15mm Plaster Board)

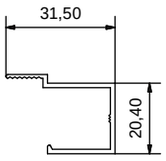
Female Aluminium Sections





Male Aluminium Sections

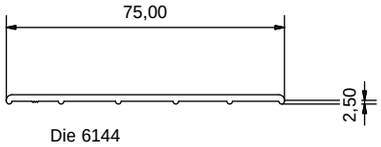




Die 6637 15mm Plasterboard Trim

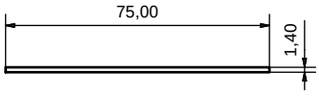
Lafarge Fixed Partition Aluminium Trim Accessories continued

Aluminium Skirting: 75mm Ribbed Skirting



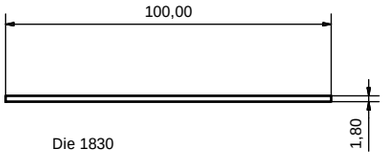
Die 6144

Aluminium Skirting: 75mm Flat Skirting



Die 1823

Aluminium Skirting: 100mm Flat Skirting



Die 1830

Technical Specification:

- Lafarge Fixed Partition: 76mm
  Supply and install Lafarge Fixed Partition from Lafarge Gypsum drywall partitioning system with an all over thickness of 76mm comprising internal framing formed of 51mm Lafarge galvanized steel studs fixed at 600mm centers to Lafarge galvanized steel track / aluminium female head section and Lafarge galvanized steel floor track, where necessary, any additional galvanized steel studding to form door openings, glazing and other apertures, angles and corners and terminated ends. The internal steel framing is to be dressed on both sides with 12mm thick Lafarge Plasterboard in single lengths to suit height, butt jointed and secured to steel studding with 25mm drywall screws at maximum 220mm centers. Joints are to be tapped and jointed with Lafarge Jointing Compound and prepared for painting or wallpapering. All external aluminium door frames, glazing frames, ceiling and wall channels and skirting are to be formed of natural anodized / colour anodized / powder coated to specific colour.

  Maximum height: 3600mm
  Installation to be in accordance with SABISA (South African Building Interior Systems Association) installation guidelines

- Lafarge Fixed Partition: 89mm
  Supply and install Lafarge Fixed Partition from Lafarge Gypsum drywall partitioning system with an all over thickness of 89mm comprising internal framing formed of 64mm Lafarge galvanized steel studs fixed at 600mm centers to Lafarge galvanized steel track / aluminium female head section and Lafarge galvanized steel floor track, where necessary, any additional galvanized steel studding to form door openings, glazing and other apertures, angles and corners and terminated ends. The internal steel framing is to be dressed on both sides with 12mm/15mm thick Lafarge Plasterboard in single lengths to suit height, butt jointed and secured to steel studding with 25mm drywall screws at maximum 220mm centers. Joints are to be tapped and jointed with Lafarge Jointing Compound and prepared for painting or wallpapering. All external aluminium door frames, glazing frames, ceiling and wall channels and skirting are to be formed of natural anodized / colour anodized / powder coated to specific colour.

  Maximum height: 3600mm
  Installation to be in accordance with SABISA (South African Building Interior Systems Association) installation guidelines



- Lafarge Fixed Partition: 112mm (1 Hour Fire Rating)
  Supply and install Lafarge Fixed Partition from Lafarge Gypsum drywall partitioning system with an all over thickness of 112mm comprising internal framing formed of 64mm Lafarge galvanized steel studs fixed at 600mm centers to Lafarge galvanized steel track positioned at floor, head and walls. The internal steel framing is to be dressed on both sides with two layers of 12mm thick Lafarge Plasterboard in single lengths to suit height, butt jointed and secured to steel studding with 25mm drywall screws at maximum 220mm centers (first layer) and 41mm drywall screws (second layer). Joints are to be tapped and jointed, including first layer of Lafarge Plasterboard, with Lafarge Jointing Compound and prepared for painting.

  Maximum height: 3600mm
  Installation to be in accordance with SABISA (South African Building Interior Systems Association) installation guidelines

- Lafarge Fixed Partition: 89mm (1 Hour Fire Rating)
  Supply and install Lafarge Fixed Partition from Lafarge Gypsum drywall partitioning system with an all over thickness of 89mm comprising internal framing formed of 64mm Lafarge galvanized steel studs fixed at 600mm centers to Lafarge galvanized steel track positioned at floor, head and walls. The internal steel framing is to be dressed on both sides with 12,5mm thick Lafarge Fire Check Plasterboard in single lengths to suit height, butt jointed and secured to steel studding with 25mm drywall screws at maximum 220mm centers. Cavity to be filled with U Thermo Matt 6. Joints are to be tapped and jointed with Lafarge Jointing Compound and prepared for painting.

  Maximum height: 3600mm
  Installation to be in accordance with SABISA (South African Building Interior Systems Association) installation guidelines



- Lafarge Fixed Partition: 112mm (2 Hour Fire Resistance)
  Supply and install Lafarge Fixed Partition from Lafarge Gypsum drywall partitioning system with an all over thickness of 112mm comprising internal framing formed of 64mm Lafarge galvanized steel studs fixed at 600mm centers to Lafarge galvanized steel track positioned at floor, head and walls. The internal steel framing is to be dressed on both sides with two layers of 12,5mm thick Lafarge Fire Check Plasterboard, stagger fixed, in single lengths to suit height, butt jointed and secured to steel studding with 25mm drywall screws at maximum 220mm centers (first layer) and 41mm drywall screws (second layer). Between the first and second layer of board each side, apply a sheet of 0,5mm galvanized steel. Joints are to be tapped and jointed with Lafarge Jointing Compound and prepared for painting.

  Maximum height: 3600mm
  Installation to be in accordance with SABISA (South African Building Interior Systems Association) installation guidelines



- Lafarge Fixed Partition: 126mm (Residential)
  Supply and install Lafarge Fixed Partition from Lafarge Gypsum drywall partitioning system with an all over thickness of126mm comprising internal framing formed of 102mm Lafarge galvanized steel studs fixed at 600mm centers to Lafarge galvanized steel track, any additional galvanized steel studding to form door openings, glazing and other apertures, angles and corners and terminated ends. The internal steel framing is to be dressed on both sides with 15mm thick tapered edge Lafarge Plasterboard in single lengths to suit height, butt jointed and secured to steel studding with 25mm drywall screws at maximum 220mm centers. Joints and wall abutments are to be tapped and jointed with Lafarge Jointing Compound and prepared for painting or wallpapering. All door frames, glazing frames and glazing frames to consist of either steel or timber frames installed to manufacturer's specifications.
  Wall and ceiling junction to be dressed with specified cornice detail.

  Maximum height: 3600mm
  Installation to be in accordance with SABISA (South African Building Interior Systems Association) installation guidelines

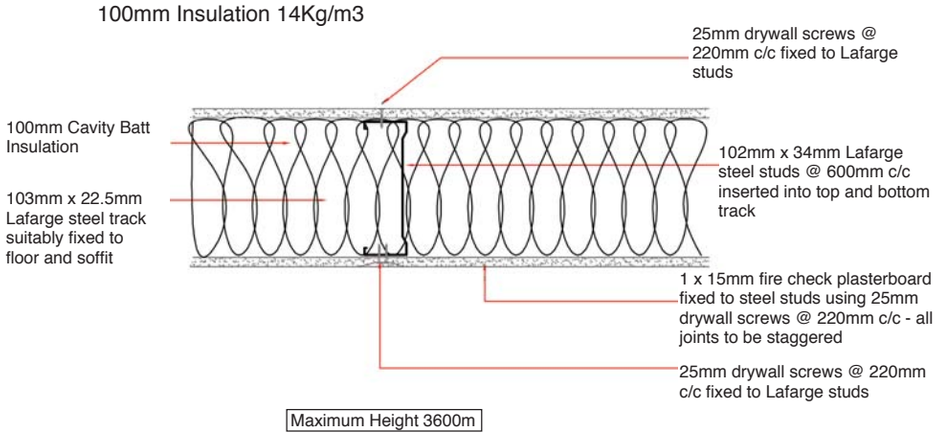
- Residential Wall Unit (Entertainment Centre)
  Supply and install Lafarge Plasterboard entertainment wall unit comprising of Lafarge 51mm / 64mm stud and track, galvanized 25 x 25mm x 0,6mm Lafarge galvanized steel angle, galvanized corner bead, flexible plastic corner bead, clad with 12mm Lafarge Plasterboard secured with 25mm drywall screws at 220mm centers to specific design as detailed.

  Edges to be trimmed with corner bead, fixed into position and jointed with Lafarge Jointing Plaster, alternatively the complete unit to be flush plastered in 2mm thick Lafarge Finishing Compound.

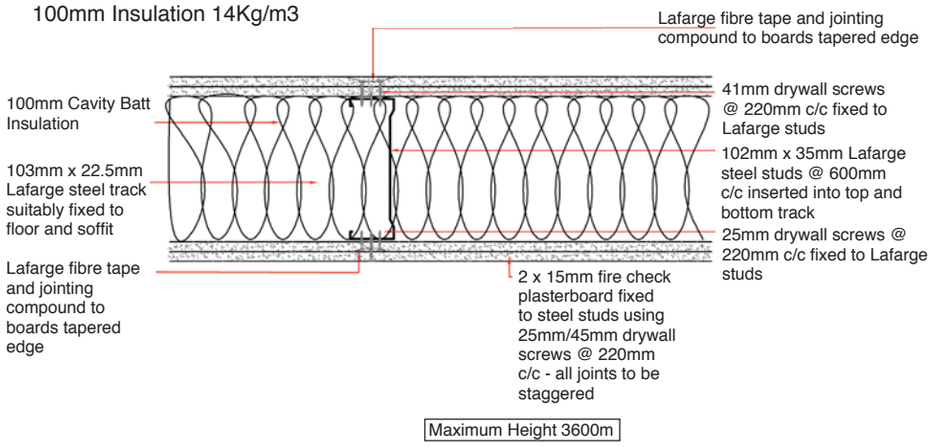
  Maximum spacing of support structure 300mm, additional bracing and support to be fixed into position to cater for additional loading, dependent on individual design and location of entertainment equipment. Design can be modular or circular to cater for design criteria.

Typical residential wall divisions

Internal room division wall
102mm Stud System, 15mm Fire check plaster board, Single layer either side
132mm Over all (60 minute fire rating)
100mm Insulation 14Kg/m3



Internal room division wall & corridor
102mm Stud System, 15mm Fire check plaster board, double layer either side
162mm Over all (120 minute fire rating)
100mm Insulation 14Kg/m3



General:

Identify all components as well as prefabricated components
Plan, calculate and mark the layout of the partition
Plan the required material quantities

Lafarge Gypsum steel framing:
Fix the track to the floor, cut as required, remembering to leave space for door openings.
Plumb upwards to correctly position and install the ceiling track or head / wall channel

Alternately fix head channel to the ceiling and plumb downwards
Insert additional studs for corners and abutments.
Load bearing studs and suitable timber insert should be used to achieve the strength requirements of the framing assembly and adequately support the weight of the door.

Insulation:
Fit securely with closed joints, leaving no gaps. Unless the insulation is self-supporting, fix the insulation at head of frame using 25mm x 25mm galvanized angle.

Services:
All services are to be completed

Install Lafarge Plasterboard:
Establish a starting point
When installing the first plasterboard, ensure that the first joint will be plumb (as the wall may not be plumb).
Line up the studs as you proceed from here, remember the studs are spaced at 600mm centers.
Use small sections of plasterboard during installation to keep plasterboards off the ground to prevent moisture from creeping up the plasterboards.
Fix plasterboards to steel frame work using 25mm drywall screws spaced at 220mm centers. Fixings on plasterboard joints to be staggered.

Vertical Joints:
Lightly butt boards together
Center joints on studs. Ensure that the joints on opposite sides of studs are staggered. For doubl-layer boarding, stagger the joints between layers.

Horizontal Joints:
Lightly butt boards together
Horizontal joints will not be permitted in walls less than or equal to 3600mm, only walls over 3600mm (exceeding the maximum available length of board). Agree positions of joints where not specified, provide horizontal framing to support the horizontal edges of boards. Ensure the horizontal joints on opposite sides of studs are staggered. For double board lining, stagger joints between layers by at least 600mm. Provide horizontal framing to support the horizontal edges of the first layer of the plasterboard.

Lafarge Fixed Partition Systems

Acoustics:
Refer to Lafarge Gypsum specifications.
Sound seal location, at junctions between drywall frame and adjoining structure. Sound seal is to be provided as a continuous band to clean, dry, dust-free surfaces, leaving no gaps.
Seal any gaps and service penetrations.

Fire stopping:
Seal any gaps and service penetrations with an intumescent sealant to prevent penetration of flame.

Fixing Plasterboard to Lafarge Gypsum metal studs:
Single layer, fix securely to all supports at 220mm centers using 25mm drywall screws
Double layer (outer layer), fix securely to all supports at 220mm centers using 41mm drywall screws
Stagger the drywall screws along plasterboard butt joints
Position the drywall screws not less than 13mm from cut edges and 10mm from bound edges of plasterboard

Deflection Heads:
To be specified by the project structural engineer

Specification:
Installation to conform to detail as specified by Lafarge Gypsum and AAAMSA, SABISA General Specification for Drywall Partitions and Lightweight internal walls.

Finishing:

- Joints
  Material: Lafarge Jointing Plaster and Fibatape
  Lightly sand cut edges of plasterboards to remove paper burrs. Cover all joints, gaps and internal angles with Lafarge Fibatape and dress with Jointing Plaster. For application of Jointing Plaster, please refer to manufacturer's specifications.

- Full Skim
  Material: Lafarge Finishing Compound and Fibatape
  Lightly sand cut edges of plasterboards to remove paper burrs. Cover all joints, gaps with Lafarge Fibatape and dress joints with Jointing Plaster. Apply skim coat to surface area as required. For application of Finishing Compound, please refer to manufacturer's specifications.

- Corners
  Material: Lafarge Gypsum metal corner bead
  Apply corner bead to corners by fixing with drywall screws.
  Apply Jointing Compound to external face. For application methods of Jointing Plaster, please refer to manufacturer's specifications.

- Painting Plaster Finishes:
  Sand joints smooth using 80grit sand paper
  Should light sand papering be required on plastered ceilings, this can be done
  Use only PVA water-based paint
  Consult paint manufacturer for recommendations
  Drawing reference:

Wet Area Specification:

- **Drywall:**

  Performance Criteria: As per drywall system

  Framework:
  Studs: 102mm, 64mm x 35mm Lafarge Studs at 400mm centers
  Floor Track: 102mm, 64mm x 22,5mm Lafarge Track fixed with two rows of staggering fixings at 400mm centers.
  Head Track: 102mm, 64mm xx 22,5mm Lafarge Track fixed with two rows of staggered fixings at 400mm centers
  Fixing details as per specification

  Note: Additional timber supports positioned and fixed within studs, as noggins for support of fittings & fixture
  Adequate support to be provided for Head Track

  Deflection allowance: To be determined by structural engineer

  Lining:
  As per drywall specification. One layer of 12,5mm Moisture Check Plasterboard as face layer.
  Plasterboard backing layer as required & specified
  Fix plasterboard with 25mm drywall screws at 220mm centers
  Finishing: Apply Fibatape to all joints, skim joints with Lafarge Jointing Plaster and if required, full skim with Lafarge Finishing Compound.

  Insulation:
  Cavity insulation: 1200mm x 600mm x 100mm, 50mm Cavity Batt

- **Tiling to Plasterboard:**
  Metal Stud Partition – Ceramic Tiles

  Performance Criteria: Maximum allowable load: 20kg/m2

  Framework:
  Studs: “102mm, 64mm x 35mm Lafarge Studs” at 400mm centers
  Floor Track: 102mm, 64mm x 22,5mm Lafarge Track
  Head Track: 102mm, 64mm x 22,5mm Lafarge Track (unless determined otherwise by deflection)
  Head Condition: Fixed to underside of structural soffit.
  Deflection Allowance: To be determined by structural engineer.

  Lining:
  1 Layer 12,5mm Lafarge Moisture Check Plasterboard sealed using sealer. Screws first lining layer with 25mm drywall screws at 220mm centers. Cavity Insulation: 1200mm x 600mm x 100mm, 50mm Cavity Batt
  Finishing: Apply Fibatape to all joints, skim joints with Lafarge Jointing Plaster and if required full skim with Lafarge Finishing Compound.

  Finishing Requirements: Tiled surface
  Lafarge Corner Bead to all external corners finished with Lafarge Jointing Compound
  Fibtape to all internal corners finished with Jointing Compounds.
  Surface Preparation:
  Mix 20kg Tylon “Plaskey CI250” with 10 litres of Tylon “Key-it CT 117”.
  Apply the mixture to drywall with a block brush – thickness 2mm.
  Allow to dry for 24 hours before commencing tiling.

  Ceramic Tiles:
  Always fix tiles to primed drywall. Use Tylon “Wall n Floor CM11” tile adhesive. Apply substrate to a minimum base thickness of 3mm. Allow the adhesive to dry for 24 hours before grouting.
  Should large, heavy or floor tiles be used, then the floor trowel must be used to spread the adhesive to a 6mm bedded thickness.

  Grouting:
  Grout with Tylon Tie Grout “CE33” cement-based grout.
  For more water resistance the grout must be mixed with Tylon Bond-It (replace the water normally used in the mix).
  Along the wall edges and corners apply silicon instead of grout.

- **Tiling to Plasterboard:**
  Metal Stud Partition – Painted Surface

  Framework:
  Studs: “102mm, 64mm x 35mm Lafarge Studs” at 400mm centers
  Floor Track: 102mm, 64mm x 22,5mm Lafarge Track
  Head Track: 102mm, 64mm x 22,5mm Lafarge Track (unless determined otherwise by deflection)
  Head Condition: Fixed to underside of structural soffit
  Deflection Allowance: To be determined by structural engineer

  Lining:
  1 Layer 12,5mm Lafarge Moisture Check Plasterboard sealed using sealer
  Screws first lining layer with 25mm drywall screws at 220mm centers
  Cavity Insulation: 1200mm x 600mm x 100mm, 50mm Cavity Batt

  Finishing:
  Apply Fibatape to all joints, skim joints with Lafarge Jointing Plaster and if required, full skim with Lafarge Finishing Compound.

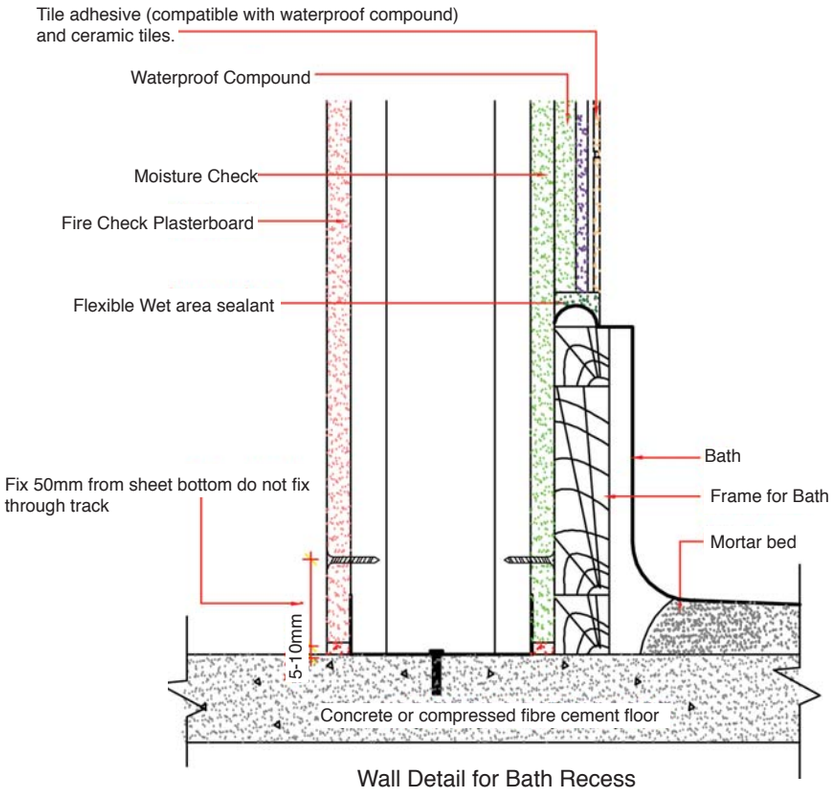
  Finishing Requirements: Painted surface
  Seal surface of plasterboard with Tylon Bond-it. Allow 24 hours to dry.
  Plaster the complete surface with Lafarge Finishing Compound. Allow 24 hours to dry.
  Seal plastered survace with Tylon Bond-it. Allow 24 hours to dry.
  Paint surface with manufacturer’s recommended paint for wet areas.

  Along the wall edges and corners apply silicon instead of grout.

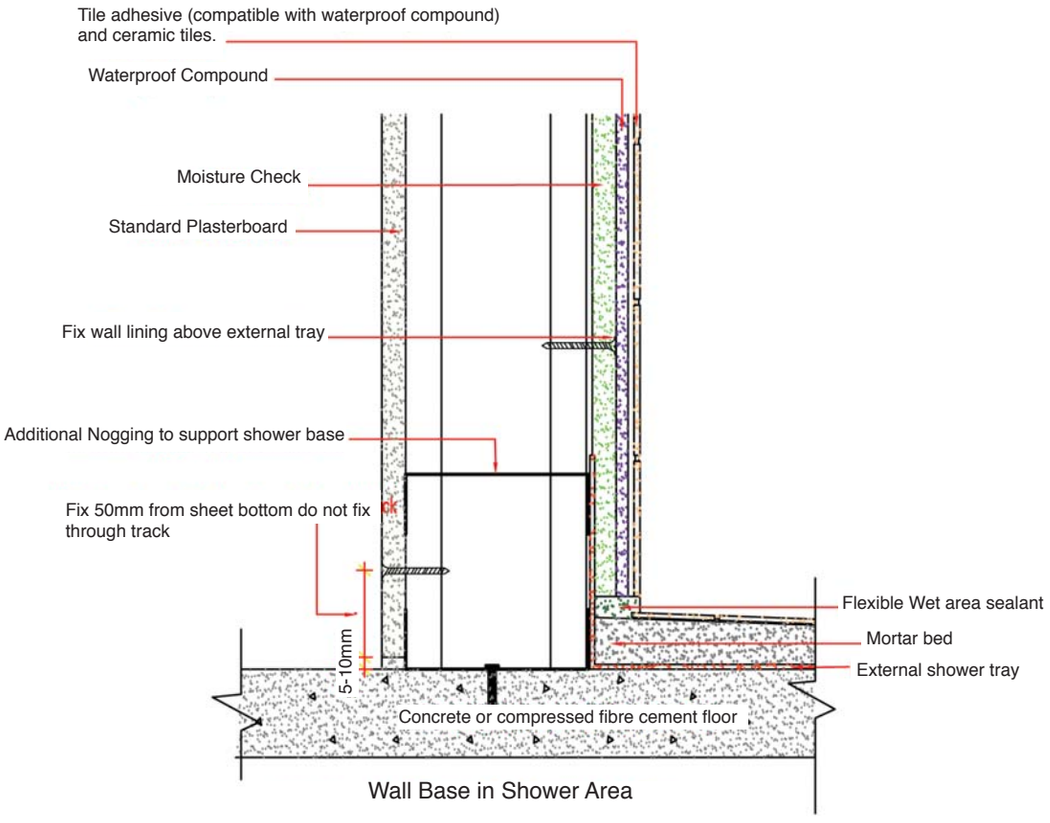
  In both applications, keep the plasterboard 10mm off the floor and before decoration seal this gap with suitable silicone or Polysulphide sealant.
  Before decoration, seal all vertical and horizontal joints with suitable silicone or Polysulphide sealant.

Lafarge Fixed Partition Systems

Construction Details for Wet Areas



Wall Detail for Bath Recess



Wall Base in Shower Area

Fixtures and Fittings:

There is a wide variety of components suitable for securing fixtures and fittings to drywalling. Generally, the choice of individual fixing components will depend on the type of systems and the loading requirements.

This section gives recommendations on the selection of generic fixings.

Consider the layout of fixtures and fittings at the design stage to allow necessary supports to be provided.

The guidance given is primarily concerned wit fixtures at the time of installation.

Subsequent installation is less easy, especially for heavier fixtures which will often require identification of the basic frame in hollow partitions.

Fixing (other than to secure lightweight components) should be made into studs, fixing channel, or timber noggins.

Medium to heavyweight components are required to be supported between studs.

Methods of fixing to Lafarge Partition Systems:

1. Pictures, Calendars, etc:
   Use either a 'stick-on' type of picture hanger or the nail and hook type as per detail. Ensure that the nail is driven downwards into the Lafarge Plasterboard at an angle of approximately 20°.

2. Mirrors, Ornaments, etc:
   Use a butterfly bolt type of fastener which is fitted onto the Lafarge Plasterboard in any position.

3. Medium Objects (shelves):
   Fix through the plasterboard into the drywall stud with self-tapping screws, or into a cross-member between studs which should be provided during erection of the framing, or use a butterfly bolt-type fastener.

4. Heavy-Duty Objects (hand basins, cisterns, etc):
   Drywall studs should be spaced more closely (e.g. 300mm). Run horizontal timber noggins of up to 114mm x 38mm or double-nested track channels between the vertical notched studs and secure with screw. Fix objects to noggins and studs.

5. Extra-Heavy Objects:
   Items subject to sever abuse or impact should be supported by a steel framework which is bolted to the floor and studs.

Note:
Please note that all plumbing and electrical fitting designs need to be signed off by the architect and need to comply with the requirements of SANS 10400: XA-2011

Lafarge Fixed Partition Systems

Fixing to Lafarge Wallboards
Drywall construction can accommodate most fixtures providing the appropriate fixing or fixing provision is utilised. Fixtures can be attached directly to the finished dry lining using the recommended fixing given in table opposite.

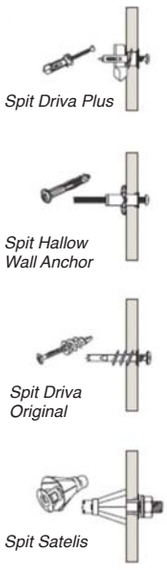
For the medium and heavyweight fixings in table opposite, it is very important that the plasterboard is carefully and accurately drilled and that all the fixings are installed as per the manufacturer's recommendations.

Note: On the heavier fixtures, it is necessary to use a minimum of four fixings. Holes should always be drilled and never punched.

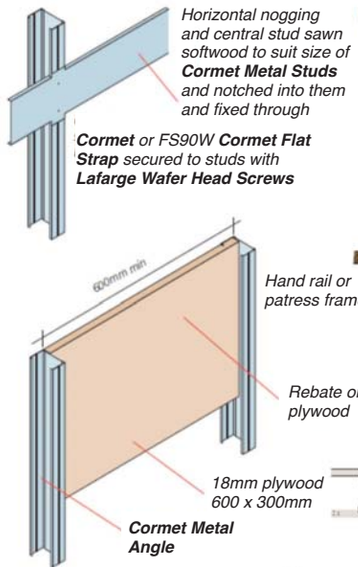
Fixtures

Fixture Load	Examples	Fixing Provisions	Notes
Very Light	Small notices, Message boards	Picture hooks Wood screws	See manufacturer's literature for maximum loadings
Light	Mirrors, Floor standing storage, Light fittings, Uniform hooks, Lightweight signage	Spit Driva LD Spit Driva Original Spit Driva Plus Fixing Channel	See manufacturer's literature for maximum loadings
Medium	Radiators Wall storage Water heaters Shelves X-ray lightboxes	Spit Spring Toggle Spit Hollow Anchor Spit Satelis Fixing channel Timber battens Boxed studs Extra studs	See manufacturer's literature for maximum loadings
Heavy	Wall mounted sanitary ware, Large wall storage, Monitor mountings, Patient bed hoists, Worktops, Nursing stations, Drug safes, Disabled toilet grab rails	See diagrams below	See manufacturer's literature for maximum loadings

For Light Fixture Loads

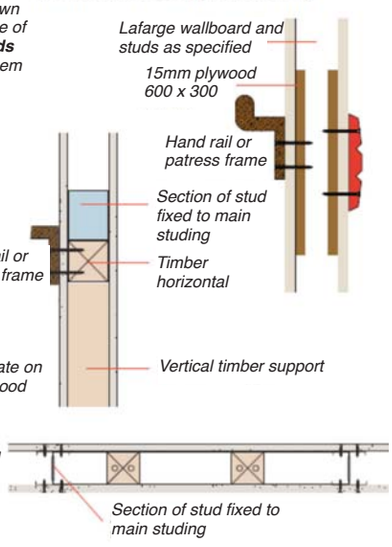


For Medium Fixture Loads

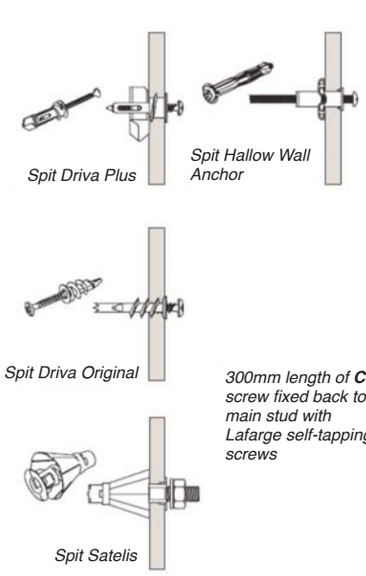


For Heavy Fixture Loads

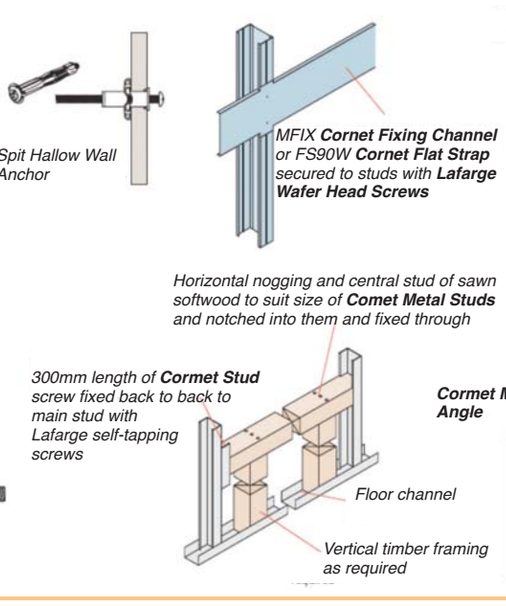
Hand rail and support patress framing



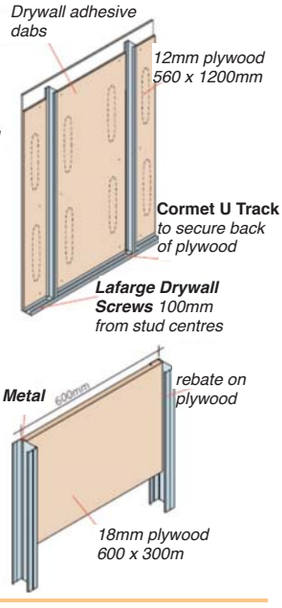
For Light Fixture Loads



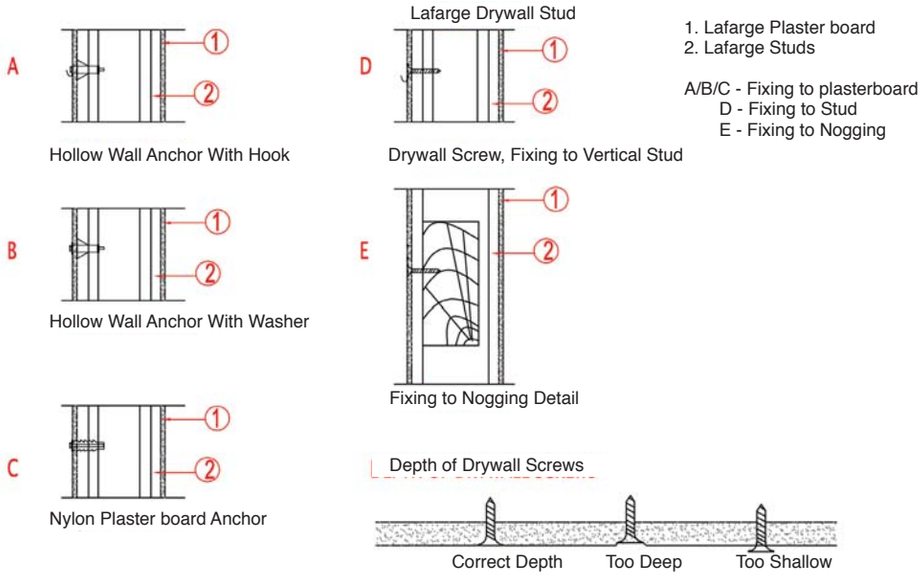
For Medium Fixture Loads



For Heavy Fixture Loads



Plasterboard Fitting and Fixing Details



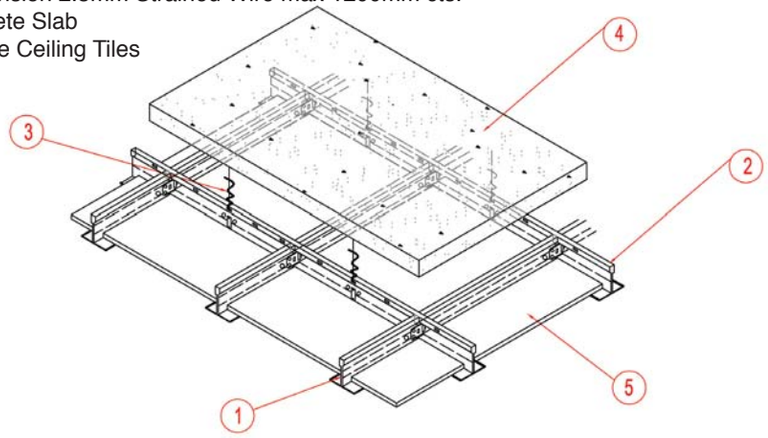
Lafarge Ceiling Systems

Standard Specifications for Ceilings

a) Lafarge Ceiling Grid exposed Face 24mm (1200x600 system)
Supply and install Lafarge Ceiling Grid exposed face 24mm tee suspended ceiling grid system. Main tee's spaced at 1200mm & cross tee's spaced at 600mm (1200x600 system)
Ceiling tee's to be white capped.
Main tee's supported at 1200mm maximum

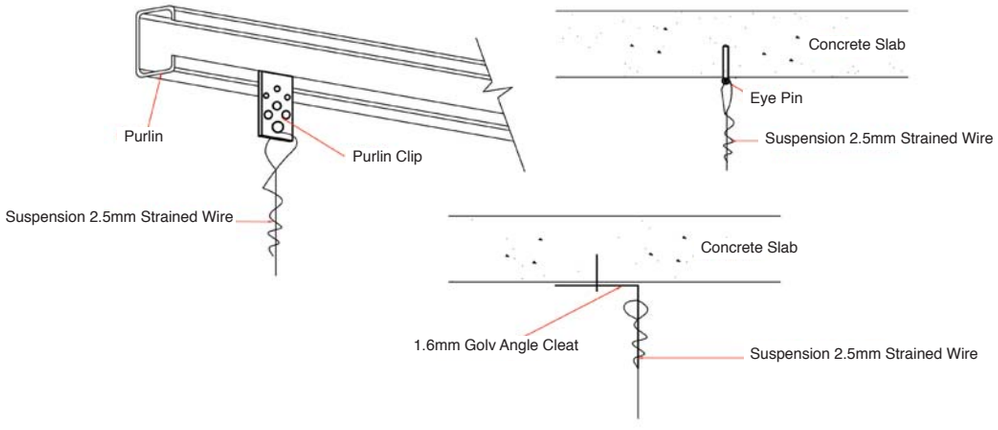
Grid Layout for Suspended Ceilings using 1200mm Cross T-Section

1. Cross T-Section 1200mm
2. Main T-Section 3600mm @ 1200mm cts
3. Suspension 2.5mm Strained Wire max 1200mm cts.
4. Concrete Slab
5. Lafarge Ceiling Tiles



Typical suspension details

Suspension Details for Exposed Ceiling Grid



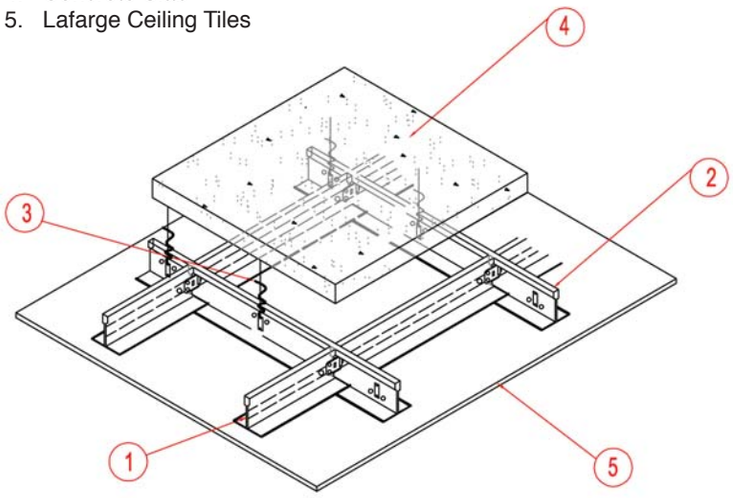
Only side fixing is recommended and it is not recommended that fixings that rely on pull force is used. The following minimum anchors are recommended for side fixing:

Type of roof truss or floor joists	Steel including light weight steel	Timber
Systems with up to two layers of board	One 5mm x 20mm Tek screw	One 6mm x 30mm chipboard screw
Systems with three layers of board	Two 5mm x 20mm Tek screws	Two 6mm x 50mm chipboard screws

b) Lafarge Ceiling Grid exposed Face 24mm (600x600 system)
Supply and install Lafarge Ceiling Grid exposed face 24mm tee suspended ceiling grid system. Main tee's spaced at 1200mm & cross tee's spaced at 600mm with 600mm cross tee's spaced between 1200mm cross tee's at 600 centers (600x600 system)
Ceiling tee's to be white capped.
Main tee's supported at 1200mm maximum

Grid Layout for Suspended Ceilings using 600mm Cross T-Section

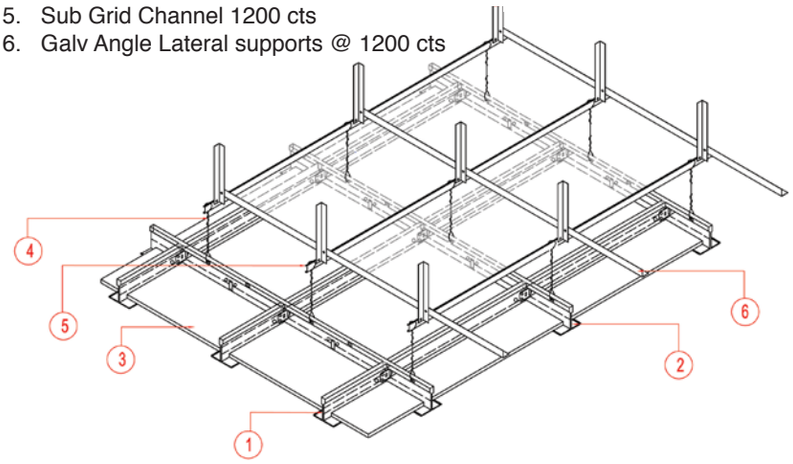
1. Cross T-Section 600mm
2. Main T-Section 3600mm @ 1200mm cts
3. Suspension 2.5mm Strained Wire max 1200mm cts.
4. Concrete Slab
5. Lafarge Ceiling Tiles



Sub-Grid Detail (Strained Wire) Exposed Ceiling

Grid Layout for Lay-In Ceilings Subgrid detail

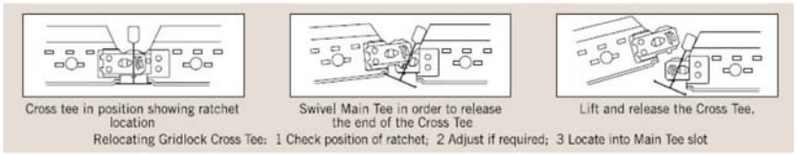
1. Cross T-Section 1200mm @ 600 cts
2. Main T-Section 3600 @ 1200mm cts
3. Lafarge Ceiling Tiles
4. Strained Wire of 2.5mm
5. Sub Grid Channel 1200 cts
6. Galv Angle Lateral supports @ 1200 cts



Lay in Suspended Ceiling

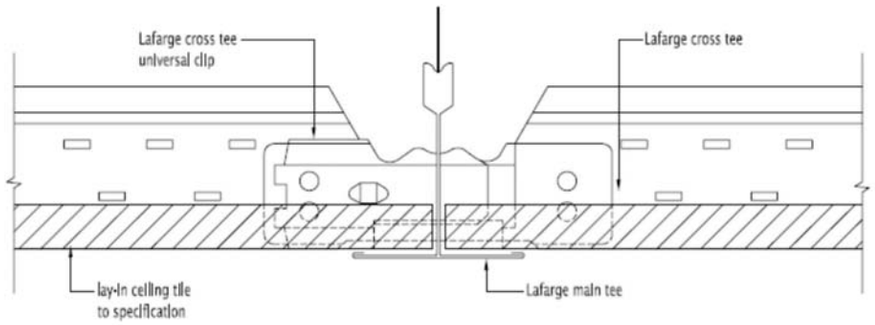
- The Lafarge Suspended Ceiling grid is an exposed face tee system. The grid is manufactured from galvanised steel which is capped across the exposed face. The Lafarge Cross Tee has a specially designed “clip” fixed at each end. This “clip” enables the Lafarge Cross Tee to ‘click’ into position, making an audible ‘click’ sound as it does so, thereby confirming that the tee section is located correctly.
- The Lafarge Main Tee ends are designed to ensure that the Main Tees easily line up to each other, while at the same time ensuring a tighter connection.
- The Lafarge Cross Tee is then easily clipped into position by lining the end up to the right side of the pre-punched opening of the Lafarge Main Tee.
- The opposite Lafarge Cross Tee is then inserted in the same manner.
- The audible ‘click’ sound confirms that the correct location has been found and signifies that the Lafarge Cross Tee is locked firmly into position.
- The size and design of the Lafarge Cross Tee and clips facilitates simple and easy assembly of the Lafarge Ceiling System
- The Lafarge Ceiling Grid can be dismantled as quickly and simply as it is connected. This ensures a high degree of re-usability of the Lafarge Cross Tees.

Dismantling Lafarge Ceiling Tees from Main Tees



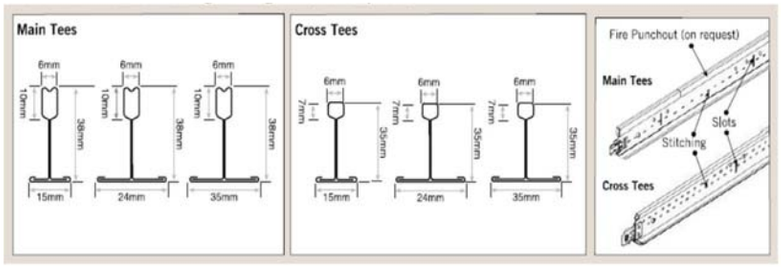
Product Information

- Lafarge Ceiling Grid Systems can be manufactured with special fire expansion punch outs.
- In the event of a fire, these punch outs allow the ceiling grid to expand along a straight line, thus maintaining its shape for a longer period than conventional ceiling grids.
- End Clip – locking type.
- Stitching on Lafarge Main and Cross tees for lateral rigidity.
- Reinforced and stable structure.
- Lafarge Main Tees with slots 150mm apart and first slot at 75mm.
- Lafarge Cross Tees (1200mm and 600mm) have a centre slot.
- Lafarge Cross Tees (600mm and 500mm), have not slots.



Specification
Supply and install Lafarge Suspended Ceiling stitched and galvanised system. Capping to be white / black / grey with the exposed face being 15mm, 24mm or 35mm. Installation is to be in accordance with SABISA's installation guidelines.

Cross Section Details of Lafarge Ceiling Grid (Tees exposed)



Formulae to calculate materials for suspended ceilings:

Installation of grid shall be in accordance with the manufacturer's specification.

a) 1200X600mm Grid:

1. Main tees 3600mm long at 1200mm centres.
   Multiply total ceiling area X 0.232 = number of main tees.
2. Cross tees 1200mm long at 600mm centres.
   Multiply total ceiling area X1.383 = number of cross tees.
3. Wall angle = total length of wall divided by 3.6 = number of wall angles.
4. Suspension hangers at maximum 1200mm centres.
   Total ceiling area divided by 1.6 = number of hangers.
5. Lafarge Ceiling Tiles 1195X595mm –
   Total ceiling area divided by 0.7 = number of tiles.

b) 600X600mm Grid:

1 – 4 as above
5. The number of 1200mm cross tees is the same as the number of 600mm cross tees required.
6. Lafarge Ceiling Tiles 595X595mm – Total ceiling area divided by 0.36 = number of tiles.

c) 1500X500mm Grid:

1. Main tees 3500mm long at 1500mm centres.
   Multiply total ceiling area X 0.191 = number of main tees.
2. Cross tees 1500mm long at 500mm centres.
   Multiply total ceiling area X 1.334 = number of cross tees.
3. Wall angle and suspension hangers as per items 3 & 4 of 1200X600mm grid calculations.
4. Lafarge Ceiling Tiles 1495X495mm – Total ceiling area divided by 0.73 = number of tiles.

NB: These calculations provide approximate quantities only and do not allow for any wastage.

Recommendations for the Suspension of Tee Systems

*Subject to loading detail suspension should not normally exceed 1200mm centres.

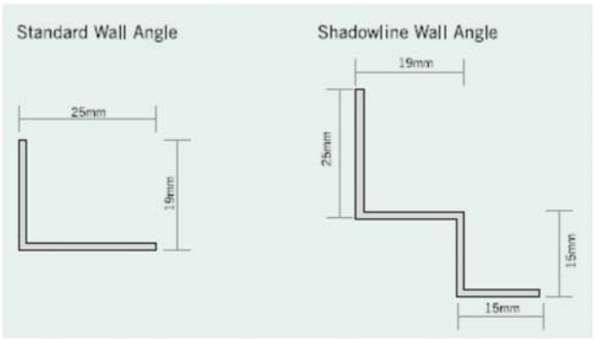
- The suspension must not be out of plumb (vertical) more than 25mm for each 150mm of plenum depth and in no case should exceed 500mm to a 3000mm depth.
- Whenever above is exceeded and / or when the hanger suspension is more than 3000mm long, then a sub grid is recommended. Should suspension be vertical then a 4000mm drop would be acceptable.
- Sub grid, when used, should be formed using Burgess Channel, alternatively please contact the Lafarge Technical Services Department to discuss suspension options.
- In no case should suspension be from other services in the ceiling void.
- A hanger suspension point within 300mm of the main tee joint must be installed when using grid that has fire punch outs.
- A hanger suspension point within 400mm from the wall angle or shadowline angle must be installed on main tees. Where cut cross tees exceed 600mm and rest on the cornice additional suspension should be installed.
- If pop rivets are used, they should be steel and not aluminium. They should have a shear strength 3 times that of the maximum allowed ceiling load.
- When securing wire to tee it should be wound tightly around itself at least 3 times.
- Should the ceiling mass exceed 20kg/m2 and a sub grid is required then a consulting engineer should recommend suitable suspension.

Installation of the Exposed Grid System:

Step 1 (setting out the grid):

- Strike a level chalk line around the perimeter of the room at the hight at which the ceiling is to be fixed. (Water levels and laser levels are the most popular methods).
- Fix the wall angle on this line using screws and plugs, or fluted nails, at maximum 400mm centres (for a tidy finish). The wall angles should not rest on top of each other at the corners. Mitre and butt-join for a tidy finish.

Steel Sections



- Establish the centre of the room and mark on the opposite walls of the room.

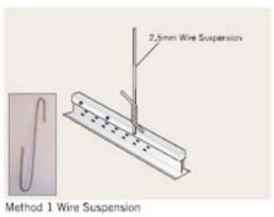
- After determining the direction in which the tiles will be installed, start from the centre of one wall and mark at 1200mm intervals, finishing with equal spacings at the adjoining walls. Repeat the procedure on the opposite wall.
- To mark the room in the other direction, start on the centre line previously marked and mark the wall at 600mm centres, finishing with equal spacing at opposite ends of the room. Mark the opposite wall in the same manner.
- Once the tile direction has been determined the first main tees should be trimmed to accommodate the first row of tiles and last row of tiles so that the spacing is equal on both sides of the room.

Step 2 (installing the grid):

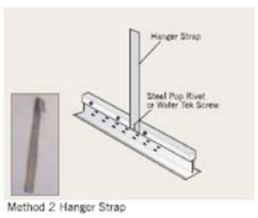
- Fix hangers to the structure spaced at maximum 1.2m centres. To fix hangers to a concrete soffit, use 25X25 angle cleats made from 1.6mm material.
- The hangers can either be 25X25mm angel, 19mm galvanised hanger strapping or the recommended 2.5mm diameter pre-strained suspension wire. Cut hanger wires to a length that allows them to hang approximately 200mm below the ceiling plane. This allows enough wire to tie to the main tees. (25X25mm galvanised angle is used to brace ceiling grid from upward air pressure where required).
- Span fish lines at various positions across the width of the room in line with the bottom surface of the wall angle.
- Attach the Lafarge main Tees to the hangers which are at 1200mm centres. Adjust the hangers so that the face of the tee section touches the fish lines.
- Insert ends of cross tees into relevant main tee slots.
- Fit ceiling tiles to grid.
- Should hold down clips be required, use 2 hold down clips per bord sharing.
- All perimeter and cut boards must be secured with hold down clips.

Step 3 (Checking the grid):

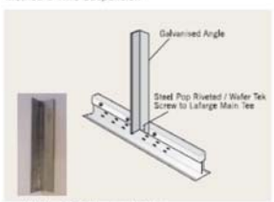
- Check the hangers for the grid are correctly spaced and adequately secured to the main structure.
- Check that the underside of the grid is perfectly level. If not, adjust accordingly.
- Check that the grid is adequately reinforced where light fittings are to be suspended from the ceiling and install additional hangers where necessary.



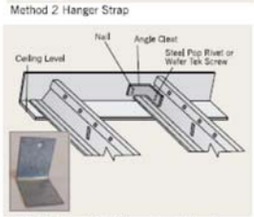
Method 1 Wire Suspension



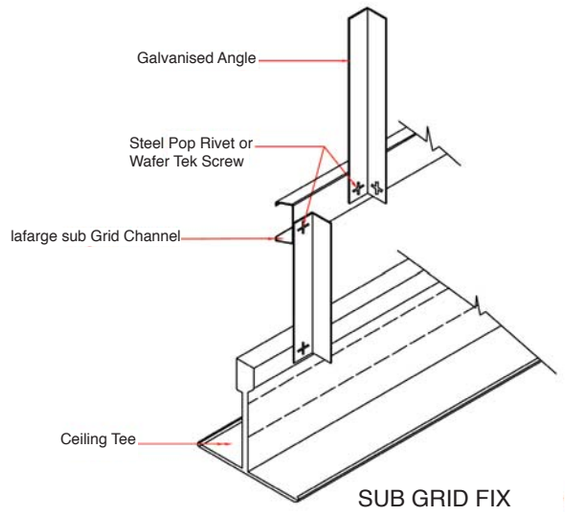
Method 2 Hanger Strap



Method 3 Galvanised Angle



Method 4 Direct Fix System for windload conditions



Tips for installing a ceiling:

- If the area of the concealed ceiling is more than 225m2, expansion joints must be used at 15m intervals in order to prevent cracking (this expansion joints is usually specified by the professional team).
- For the room requiring plasterboard for both ceiling and partition, install the ceiling first. However, if specific sound insulation is required, install the partition first.
- For any ceiling system, leave enough ventilation above the ceiling. This helps to prevent sagging.
- To check the level of an installed ceiling space, place a 2m straight bar on a checking point. The gap between the ceiling surface and the end of the straight bar should not exceed 5mm.

Lafarge Lay-in Ceiling Grid System

Description	Web Height	Code	Code	Exposed Face mm	Length	Units per box	Mass kg per box
		24mm Faced 1200/600 Ceiling System Components					
Main Tee	G 38	White GL4 SMT	Black GL4 SMT	24	3600	20	26.35
Cross Tee	G 35	White GL4 SCT	Black GL4 SCT	24	1200	60	22.82
Cross Tee	G 35	White GL4 SCT	Black GL4 SCT	24	600	60	11.41

Description	Web Height	Code	Code	Exposed Face mm	Length	Units per box	Mass kg per box
		24mm Faced 1500/500 Ceiling System Components					
Main Tee	G 38	White GL4 SMT	Black GL4 SMT	24	3500	20	25.62
Cross Tee	G 35	White GL4 SCT	Black GL4 SCT	24	1500	60	32.94
Cross Tee	G 35	White GL4 SCT	Black GL4 SCT	24	500	60	9.51

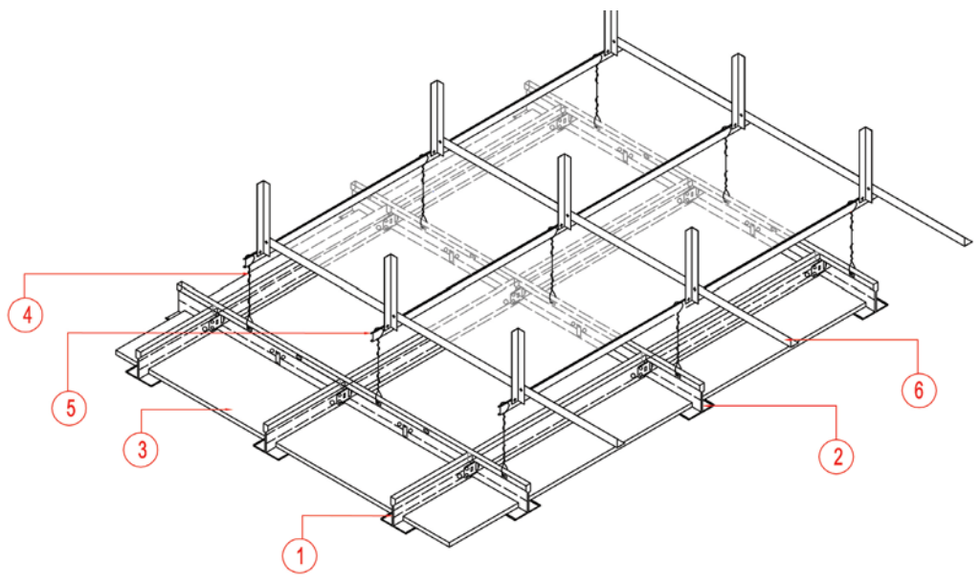
Description	Web Height	Code	Code	Exposed Face mm	Length	Units per box	Mass kg per box
		35mm Faced 1200/600 Ceiling System Components					
Main Tee	G 38	White GL4 WMT	Black GL4 WMT	35	3600	20	27.00
Cross Tee	G 35	White GL4 WCT	Black GL4 WCT	35	1200	60	27.00
Cross Tee	G 35	White GL4 WCT	Black GL4 WCT	35	600	60	13.50

Note On All Suspended Ceilings:

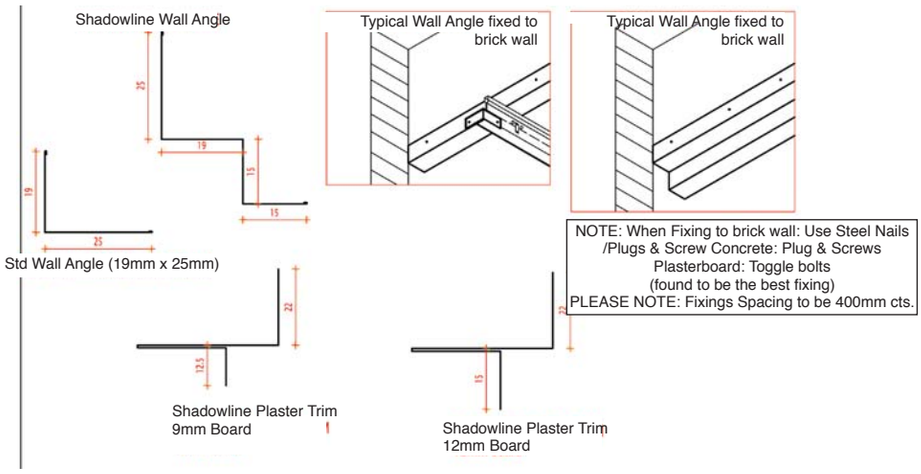
- Light fittings may require additional support where necessary.
- Air ducting etc. should be suspended / supported on its own sub-frame and should be in place before commencement of ceiling grid installation. Insulation materials can be laid over the ceiling grid system in the ceiling void. It is advisable, that when required, the insulation material be installed before the Sub-Grid Detail (Hanger Strap) Exposed Ceiling

Grid Layout for Lay-In Ceilings Subgrid detail

1. Cross T-Section 1200mm cts
2. Main T-Section 3600/1200mm cts
3. Lafarge Ceiling Tiles
4. Strained Wire 2.5mm
5. Sub Grid Channel 1200mm cts
6. Galv Angle Lateral supports @ 1200 cts



Ceiling Trim Details



Lafarge Gypsum Ceiling Tiles

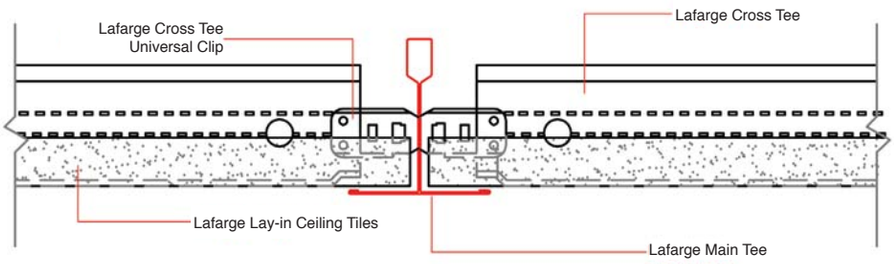
Lafarge Gypsum Ceiling Tiles are a range of ready to use ceiling tiles available in various patterns and textures. They are made from 12mm or 9mm thick plasterboard and are available in either square edge. The tough and washable vinyl finish is bonded to the board and the tiles are used in a “lay-in” exposed tee suspended ceiling system. These tiles are tested for spread of flame - SABS 0177 Part 5. (National Building Regulations – for building material).

Care should be taken to ensure that the Lafarge Gypsum Ceiling Tiles are not dropped or subjected to rough handling. These tiles should be stored in a dry area and the stacks must be packed on suitable timer supports, maximum 400mm apart and off the ground. A level, clean, dry storage area must be made available for this purpose.

Special care should be taken to ensure that the tile finish is not soiled or damaged during handling. Use of plastic gloves will assist in keeping tiles clean during installation. Vinyl tiles can be cleaned with a mild detergent if necessary.

Technical Data:	
Dimensional Tolerance:	+0-5mm
Fire Index:	Class 4.
Thermal Conductivity:	(k) 0.17 W/mC
Packaging:	6 per bundle
Weight:	9.5kg/m2 for 12mm
	7kg/m2 for 9mm

Lafarge Ceiling Tiles



*Fissured tiles have directional patterns

Vapour barriers can be laminated to the back of ceiling tiles as an optional extra for humid areas

Features
A Lafarge plasterboard ceiling tile with vinyl design covered on the surface, allowing for immediate use without additional painting.

Advantages
- Lightweight
- Durable
- Well decorated surface
- Easy to use and quick to install
- 91% light reflection (perforated tiles)
- Non combustable, fire retardant core

Applications
- Offices
- Schools
- Conference centres
- Department stores
- Factories
- Hospitals
- Painted tile:
  - Restaurants
  - Entertainment complexes

Specification: Lafarge Ceiling Grid exposed face 24mm grid system lay-in vinyl ceiling tiles (9mm)

Lafarge Gypsum Vinyl Ceiling Tiles
Supply and install Lafarge Ceiling Tiles to Lafarge Ceiling Grid exposed face 24mm grid system lay-in vinyl ceiling tiles (9mm). Shell White, Fissured, Reef, to manufacturer's specification.
Installation to be in accordance with manufacturer's specifications including SABISA (South African Building Interior Systems Association) installation guidelines

Specification: Lafarge Ceiling Grid exposed face 35mm grid system lay-in vinyl ceiling tiles (9mm)

Lafarge Gypsum Vinyl Ceiling Tiles
Supply and install Lafarge Ceiling Tiles to Lafarge Ceiling Grid exposed face 35mm grid system lay-in vinyl ceiling tiles (9mm). Shell White, Fissured, Reef, to manufacturer's specification.
Installation to be in accordance with manufacturer's specifications including SABISA (South African Building Interior Systems Association) installation guidelines

Specification: Lafarge Ceiling Grid exposed face 24mm grid system lay-in vinyl ceiling tiles (12mm)

Lafarge Gypsum Vinyl Ceiling Tiles
Supply and install Lafarge Ceiling Tiles to Lafarge Ceiling Grid exposed face 24mm grid system lay-in vinyl ceiling tiles (12mm). Shell White, Fissured, Reef, to manufacturer's specification.
Installation to be in accordance with manufacturer's specifications including SABISA (South African Building Interior Systems Association) installation guidelines

Specification: Lafarge Ceiling Grid exposed face 35mm grid system lay-in vinyl ceiling tiles (12mm)

Lafarge Gypsum Vinyl Ceiling Tiles
Supply and install Lafarge Ceiling Tiles to Lafarge Ceiling Grid exposed face 35mm grid system lay-in vinyl ceiling tiles (12mm). Shell White, Fissured, Reef, to manufacturer's specification.
Installation to be in accordance with manufacturer's specifications including SABISA (South African Building Interior Systems Association) installation guidelines

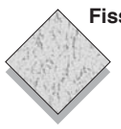
Specification:

Lafarge Thermal Ceiling Tiles with Vinyl Face 15mm Styrene backing
Supply and install Lafarge Thermal Ceiling Tiles to Lafarge Ceiling Grid exposed face 24mm grid system lay-in vinyl ceiling tiles (12mm) – (9mm). Shell White, Fissured, to manufacturer's specifications including SABISA (South African Building Interior Systems Association) installation guidelines

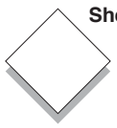
Painted and Perforated Ceiling Tiles

Vinyl Tile	Code	Nominal Dimension	Thickness	Type
Reef	JVT LR JVT LR	1200mm x 600mm 600mm x 600mm	9mm 6.6kg/m2	Square edge
	JVT LR JVT LR JVT LR	1200mm x 600mm 600mm x 600mm 1500mm x 500mm	12mm 8.78kg/m2	Square edge
Fissured*	JVT LF JVT LF	1200mm x 600mm 600mm x 600mm	9mm 6.6kg/m2	Square edge
	JVT LF JVT LF JVT LF	1200mm x 600mm 600mm x 600mm 1500mm x 500mm	12mm 8.78kg/m2	Square edge
Shell White	JVT SWH JVT SWH	1200mm x 600mm 600mm x 600mm	9mm 6.6kg/m2	Square edge
	JVT SWH JVT SWH JVT SWH	1200mm x 600mm 600mm x 600mm 1500mm x 500mm	12mm 8.78kg/m2	Square edge

Reef



Fissured



Shell White

*Fissured tiles have directional patterns

Vapour barriers can be laminated to the back of ceiling tiles as an optional extra for humid areas

Features

A Lafarge plasterboard ceiling tile with vinyl design covered on the surface, allowing for immediate use without additional painting.

Advantages

- Lightweight
- Durable
- Well decorated surface
- Easy to use and quick to install
- 91% light reflection (perforated tiles)
- Non combustable, fire retardant core

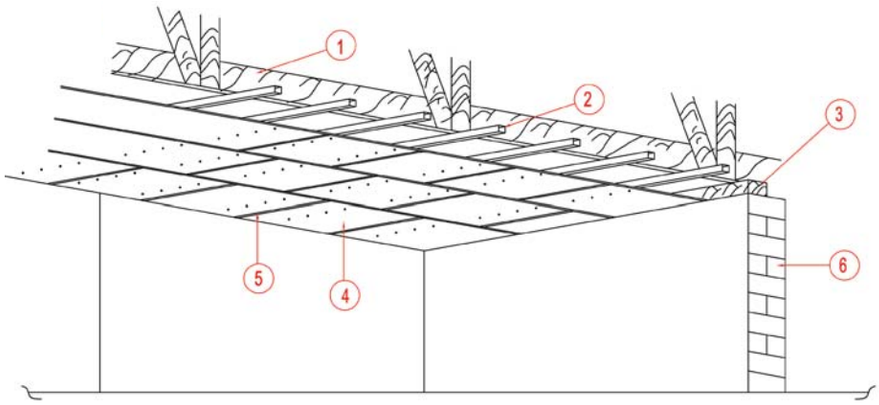
Applications

- Offices
- Schools
- Conference centres
- Department stores
- Factories
- Hospitals
- Painted tile:
  - Restaurants
  - Entertainment complexes

Timber Brandering

c) 6.4mm Lafarge Gypsum plasterboard ceiling consisting of SABS approved S.A. Pine fixed at 400mm centres in one direction onto which Lafarge Plasterboard is fixed, brown paper side up, at right angles to the brandering, using 32mm galvanised semi-clout nails spaced at 150mm centres. Joints between boards to consist of H-Strip fitted over board edges with the narrow flange facing down and boards fixed onto brandering to within 25mm from H-Strip. All nail or screws heads to be stopped and sanded level when dry.

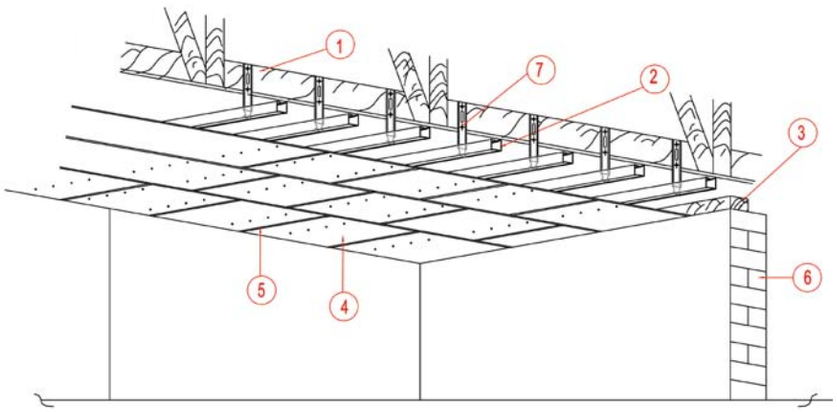
1. The Beam
2. Timber Brandering “38 x 38”mm @ 400mm cts.
3. Wall Plate
4. Lafarge Plasterboard
5. H-profile joining strip
6. Wall



d) 6.4mm Lafarge Gypsum plasterboard ceiling consisting of Lafarge Steel brandering fixed at 400mm centres in one direction onto which Lafarge Plasterboard is fixed, brown paper side up, at right angles to the brandering, using 25mm drywall screws spaced at 150mm centres. Joints between boards to consist of H-Strip fitted over board edges with the narrow flange facing down and boards fixed onto brandering to within 25mm from H-Strip. All nail or screws heads to be stopped and sanded level when dry.

Steel Brandering

1. The Beam
2. Timber Brandering “38 x 38”mm @ 400mm cts.
3. Wall Plate
4. Lafarge Plasterboard
5. H-profile joining strip
6. Wall
7. Suspension bracket

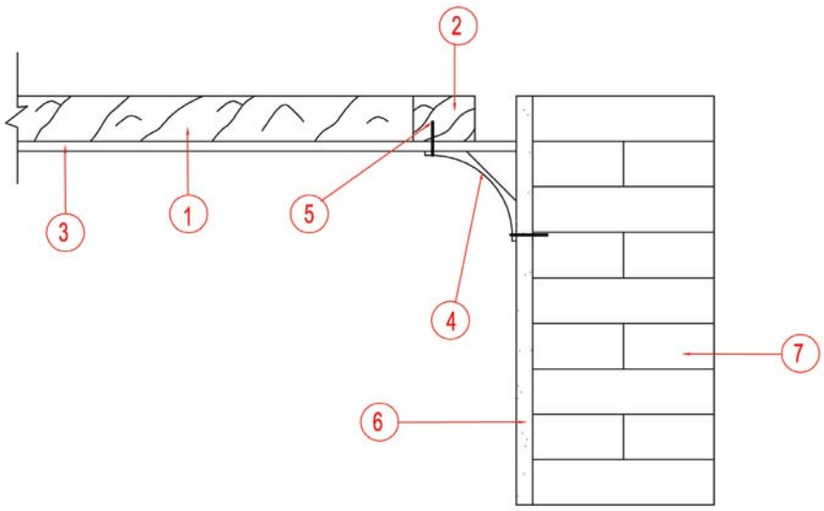


Steel Brandering should be installed as follows:

a) Steel brandering sections must be fixed at 90° to the roof trusses.
b) The suspension bracket is to be fixed to the Tie-beam by either nail or screw at a maximum of 1200mm centres and located into the Lafarge Steel Brandering.
c) Lafarge Steel Brandering is typically installed at 400mm centres.
d) The Lafarge Plasterboard should be fixed at 90° to the Lafarge Steel Brandering i.e. parallel to the roof trusses, with screws or nails spaced at a maximum of 150mm centres.
e) The Lafarge Steel Brandering system is not suitable for plastered ceilings or for 9mm and 12mm board ceilings.
f) To join two steel brandering lengths, a joiner section must be used.
g) It is advisable to fix a 20X20mm steel angle to the perimeter walls as a support for the Lafarge Steel Brandering and Lafarge Plasterboard fixing, this will ensure a solid base for cornice fixing.
h) Light fittings must be fixed to the brandering or conduct not directly to the board.

Lafarge Gypsum 75mm Gypsum Cornice Detail

1. Longitudinal brandering @ 400mm cts
2. Cross Brandering @ parameters
3. Lafarge Plasterboard
4. Lafarge Cornice
5. Fixing Point
6. Plaster
7. Wall



Lafarge Cove Cornice consists of a gypsum plaster core encased in paper. It is primarily designed for use as a cornice at the angle between wall and ceiling. It is easy to cut and fix and is suitable for decoration.
The Lafarge Cove Cornice is available in lengths of 2.7m, 3m , 3.6m or 4,2m and has a width of 75mm. The mass per linear meter is 0.72kg.

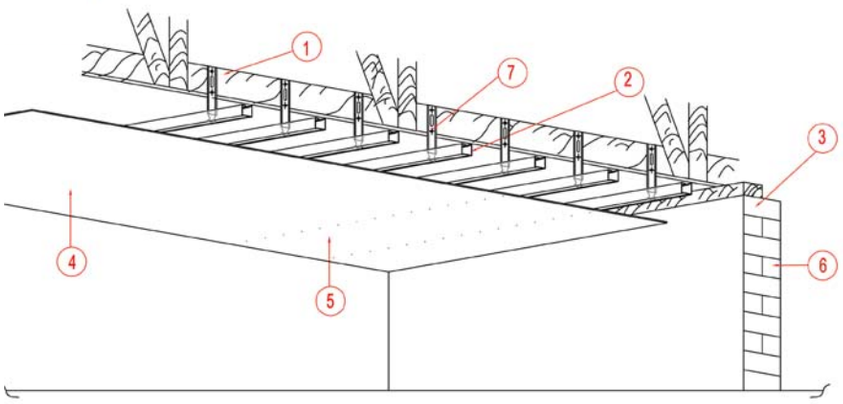
Performance:

- **Fire Protection:** When exposed to fire, Lafarge Cove Cornice behaves in the same way as Lafarge Plasterboard.
- **Durability:** Lafarge Cove Cornice has the same life expectancy as a house / building under normal conditions. If excess movement of the roof structure is expected, fix cornice to wall only.
- **Acoustic Properties:** Lafarge Cove Cornice can be used for sealing any air paths around ceiling perimeters thus helping to maintain sound insulation performance from room to room.

e) 6.4mm Lafarge Gypsum plasterboard ceiling consisting of Lafarge Steel brandering fixed at 300mm centres in one direction onto which Lafarge Plasterboard is fixed, brown paper side up, at right angles to the brandering, using 25mm drywall screws spaced at 150mm centres. Ready to receive plaster finish

Plasterboard joints to have support behind with plasterboard fixed at 150mm centres All joints to be covered with Fibatape (double over butt joints) and the ceiling then plastered with a 2-3mm plaster coat of Lafarge Skim-Lite or Skim-Stone plaster applied as per manufacturer's instructions. Alternatively Lafarge Finishing Compound can be used to plaster.

1. The Beam
2. Steel Brandering "38 x 38mm" @ 300mm cts.
3. Wall Plate
4. Lafarge Plasterboard
5. Plastered Ceiling
6. Wall
7. Suspension bracket

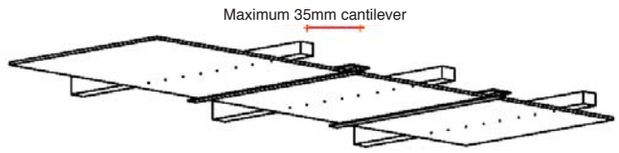


Lafarge Ceiling Systems

General.

- Lafarge Plasterboard must always be fixed with the length of the board at right angles to the brandering. Lafarge Plasterboard is fixed with the brown paper side up (ivory paper side down) for direct decoration or for plastering. Always nail or screw from the centre of the board outwards. The gap between boards should not exceed 2mm.

- Fix the first board up to 150mm from long edge. Slip the H-Strip over the edge of the board with the narrow flange facing down. Slip the second board into the H-Strip and fix both boards to within 25mm from the H-Strip. The H-Strip is not fixed at all. In the case of end joints fix parallel branders with the ends of both boards overlapping the respective branders by maximum 35mm.



Fix taper-edge Lafarge Plasterboard at right angles to brandering so that the butt joints fall on a brander. Nail or screw at 150mm centres. All joints should be jointed as per “hand jointing application” detail.

Decoration:

- For H-Strip ceilings fill all nail and screw heads and sand down when dry. Apply universal undercoat over metal H strips and apply the 1st coat, a good quality PVA emulsion based paint and a final coat as specified.

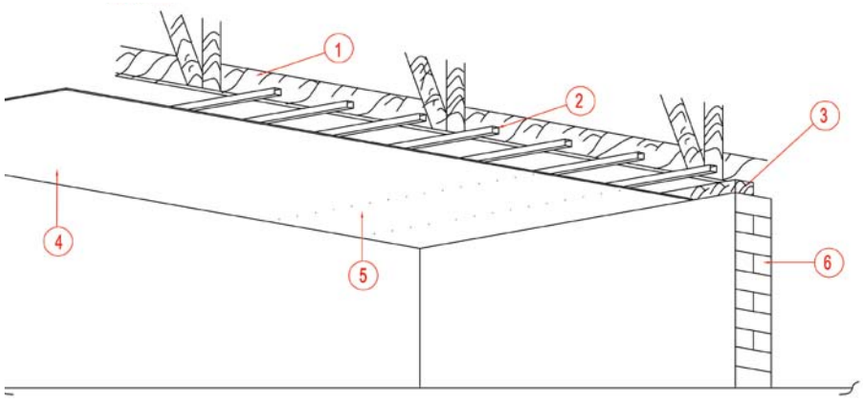
- For plaster ceilings check the entire surface carefully to see that the plaster has set hard and is dry and free from powder/dust before decorating. If painted with water based paints “PVA” no sealer coat necessary – recommended that first coated be watered down 10% and final coat applied. If painted with oil based “solvent” paints, surface requires a sealer coat – bonding liquid.

- 9mm and 12mm Flush Jointed ceilings should have a first coat of good quality PVA emulsion based paint, followed with the final coat of household paint as specified.

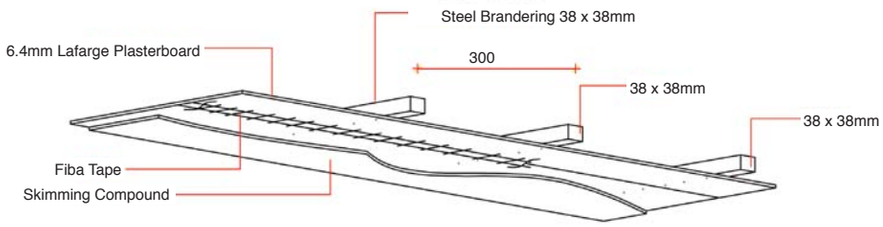
f) 6.4mm Lafarge Gypsum plastered ceiling consisting of SABS approved SA Pine brandering fixed at 300mm centres in one direction onto which 6.4mm Lafarge Plasterboard is fixed at right angles to the brandering with brown paper side up using 32mm galvanised clout or semi-clout nails spaced at 150mm centres. Or drywall screws fixed at 150mm centers

Plasterboard joints to have support behind with plasterboard fixed at 150mm centres All joints to be covered with Fibatape (double over butt joints) and the ceiling then plastered with a 2-3mm plaster coat of Lafarge Skim-Lite or Skim-Stone plaster applied as per manufacturer's instructions. Alternatively Lafarge Finishing Compound can be used to plaster.

1. The Beam
2. Steel Brandering "38 x 38mm" @ 300mm cts.
3. Wall Plate
4. Lafarge Plasterboard
5. Plastered Ceiling
6. Wall



6.4mm Flush Plastered Ceiling

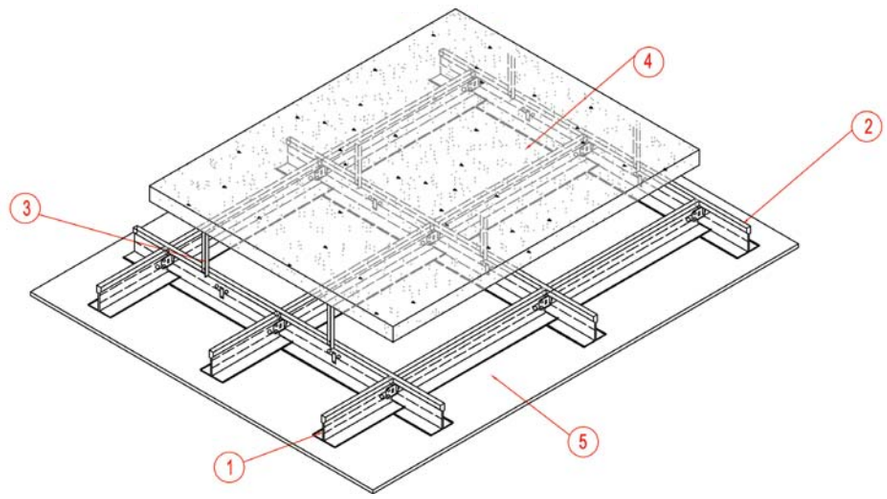


Lafarge Ceiling Systems

g) 9mm / 12mm Lafarge Gypsum Flush Jointed or Flush plastered ceiling consisting of galvanised plaster grid screw-up 3600mm main tees spaced at 1200mm centres and 1200mm cross tees spaced at 400mm centres, forming a galvanised grid, suspended to manufactures specification, onto which 9mm / 12mm taper-edge Lafarge Plasterboard is fixed with brown paper side up using 25mm drywall screws, spaced at 150mm centres. All plasterboard joints to have a support behind. All joints and or plaster to be finished as per manufacturers instructions.

Grid Layout for Plastered Ceilings using 1200mm Cross T-Section

1. Cross T-Section 1200mm @ 400 cts
2. Main T-Section 3600mm
3. Suspension 20 x 20/25 x 25 Galv Angle @ max 1200mm cts.
4. Concrete Slab
5. Lafarge 9mm/12mm Taper Edge Plaster board



Suspended Plaster Grid

Lafarge Plaster Grid is a suspended concealed ceiling grid system consisting of 3.6m main tees and 1.2m cross tees. Cross tees are inserted at 400mm centres in the main tees. The tees are galvanised steel with a knurled 35mm face. This grid is suspended using galvanised angle ensuring rigidity and stability. 9mm or 12mm boards are screwed to the grid using 25mm drywall screws and the joints are taped and jointed.

Lafarge Plaster Grid System (Gridlock)

Description	Web Height	Code	Exposed Face mm	Finish	Length	Units per box	Mass kg per box
Main Tee	G 38	GL4 PMT	35	Galvanised	3600	20	27.00
Cross Tee	G 38	GL4 PCT	35	Galvanised	1200	60	27.00

Lafarge Plaster Grid System (Nordgrid)

Description	Web Height	Code	Exposed Face mm	Finish	Length	Units per box	Mass kg per box
Main Tee	N 38	NG PMT	35	Galvanised	3600	25	33.00
Cross Tee	N 38	NG PCT	35	Galvanised	1200	75	33.00

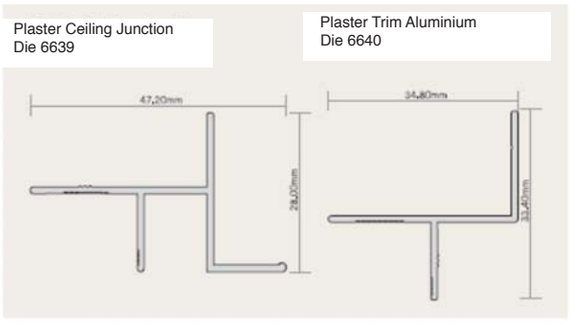
Specification:

Supply and install Lafarge Plaster Grid, stitched and galvanised 35mm face system. Main tees 3600mm with slots at 400mm centres. 1200mm Cross Tees with steel galvanised knurled cap face to main and cross tees.

Material calculations for Lafarge Plaster Grid:

1. Main tees 3600mm long at 1200mm centres. Multiply total ceiling area X 0.232 = number of main tees.
2. Cross tees 1200mm ling at 400mm centres. Multiply total ceiling area X 2.08 = number of cross tees.
3. Shadow line Plaster trim = Total length of wall divided by 3.6 = number of shadow line plaster trim.

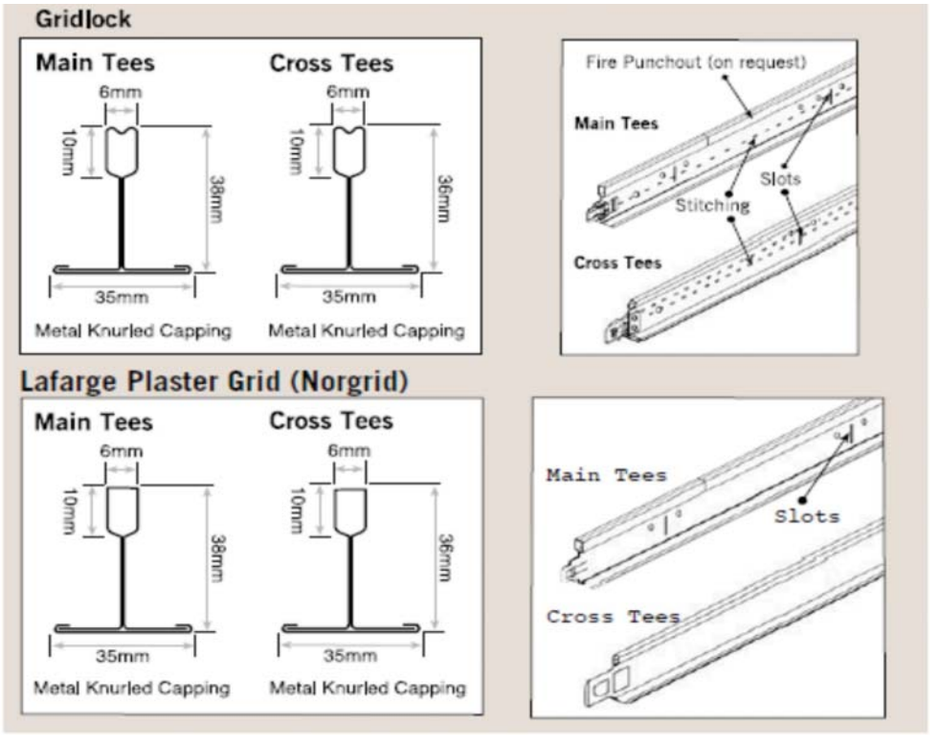
Aluminium Sections



4. Suspension hangers at maximum 1200mm centres. Total ceiling area divided by 1.6 = number of hangers.
5. Lafarge Plasterboard m2 of board divided into total ceiling area = number of boards.

Other items such as screws, Fibatape and jointing or finishing compound should also be included, please contact Lafarge Technical Services Department for assistance.

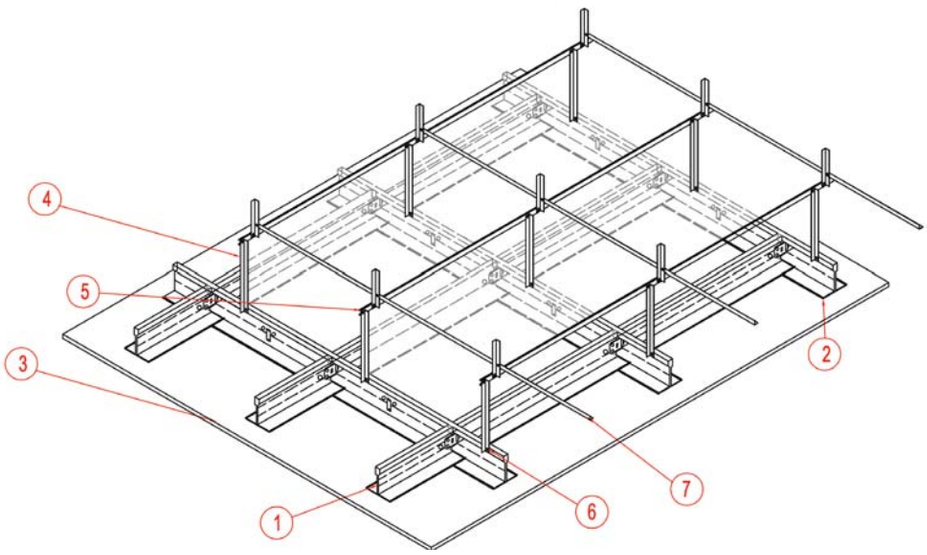
Lafarge Ceiling Systems



For plastered ceilings where the suspension height is more than 3000mm, sub-grid required. Typical detail attached

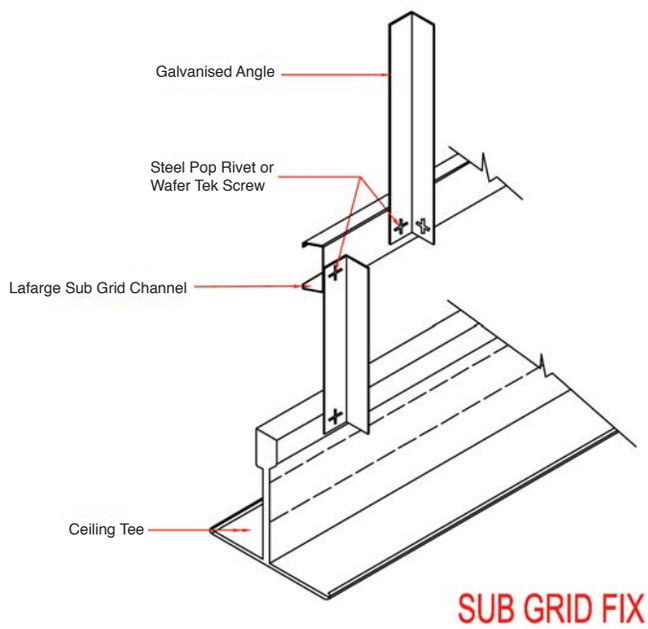
Grid Layout for Ceilings subgrid detail

1. Cross T-Section 1200mm @ 400 cts
2. Main T-Section 1200mm
3. Lafarge Plaster board
4. Galv Angle 20 x 20/25 x 25 @ 1200 cts
5. Sub Grid Channel
6. Wafer Tek Fixing
7. Galv Angle lateral supports @ 1200 cts



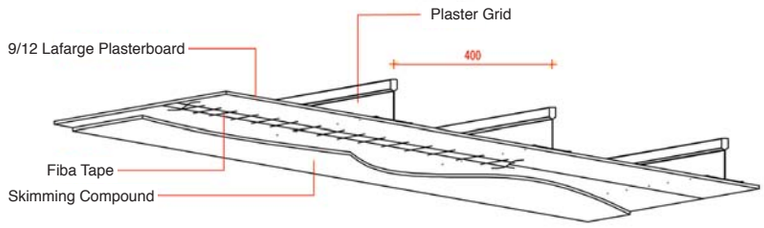
Sub-Grid Detail

Lafarge Main suspension Methods for Ceiling Grid



Lafarge Ceiling Systems

9mm & 12mm Flush Plastered Ceiling

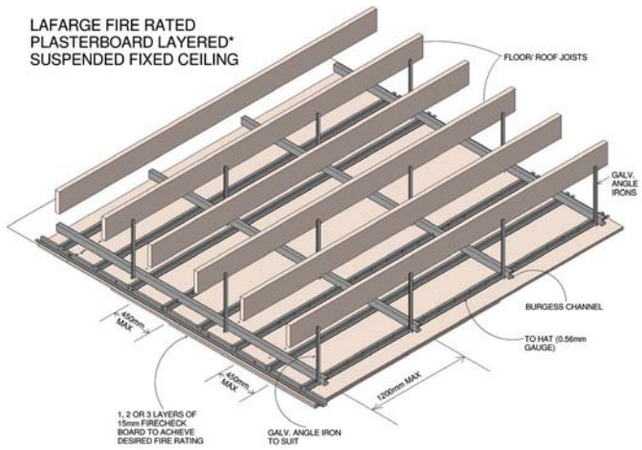


h. 15mm Lafarge Gypsum Fire Check flush plastered ceiling consisting of galvanised plaster grid screw up 3600mm main tees spaced at 1200mm centres, fixed to support structure with 0.8mm galvanised angles spaced at 400mm centres, support structure spaced at maximum 1200mm and braced to prevent lateral movement, 1200mm cross tees spaced at 400mm centres, forming a galvanised grid, suspended to manufactures specification. Plaster board to be fixed at 150mm centres, with brown paper side up. Stagger fix to plaster board joints, first layer fixed with 25mm drywall screws, second layer fixed with 41mm drywall screws. All plaster board joints to have support behind. Insulation layer over ceiling. Surface to be flush plastered.

Fire Rated Ceiling Systems
Fire Rated Suspended Ceiling Systems

1. Cross T-Section 1200mm @ 400mm cts
2. Main T-Section 3600mm
3. Suspension 25 x 25 x 0.8mm Galv Angle @ max 400mm cts
4. Plaster to Ceilings
5. Lafarge 15mm Fire Check Taper Edge Plaster board
6. 4,2 x 13 Water Tek Screws 2 per junction
7. 14kgfm3 100mm Insulation.
8. Beam Lateral Support

- Beam size and specifications by others.
- Maximum Suspension 3m.
- Beam lateral support @ 1200 cts.



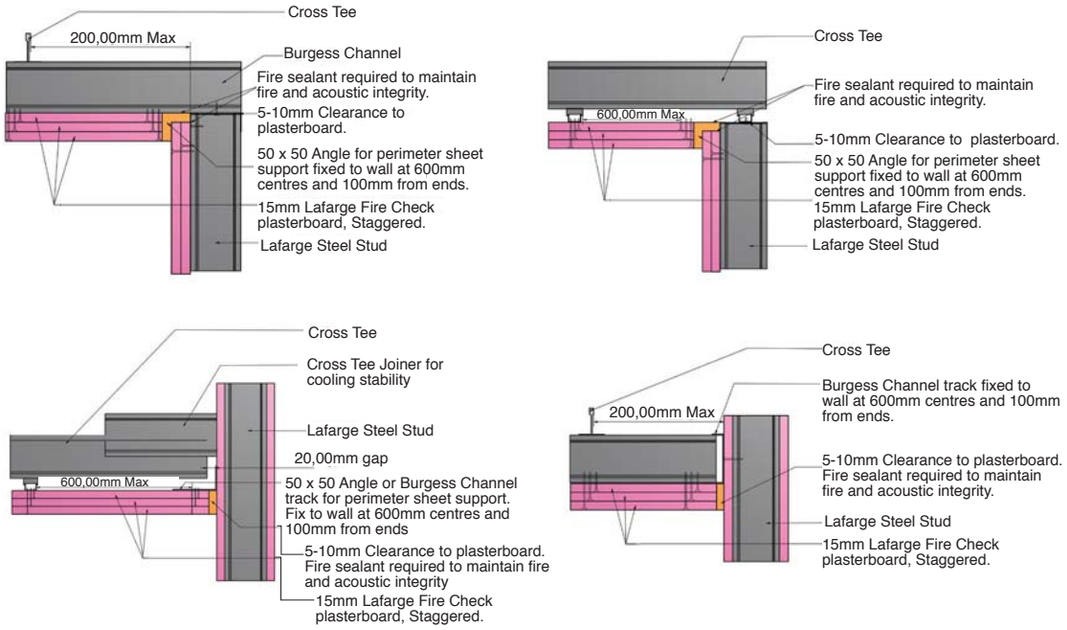
Only side fixing is recommended and it is not recommended that fixings that rely on pull force is used. The following minimum anchors are recommended for side fixing:

Type of roof truss or floor joists	Steel including light weight steel	Timber
Systems with up to two layers of board	One 5mm x 20mm Tek screw	One 6mm x 30mm chipboard screw
Systems with three layers of board	Two 5mm x 20mm Tek screws	Two 6mm x 50mm chipboard screws

Only side fixing is recommended and it is not recommended that fixings that rely on pull force is used. The following minimum anchors are recommended for side fixing.

Type of roof truss or floor joists	Steel including light weight steel	Timber
Systems with up to two layers of board	One 5mm x 20mm Tek screw	One 6mm x 30mm chipboard screw
Systems with three layers of board	Two 5mm x 20mm Tek screws	Two 6mm x 50mm chipboard screws

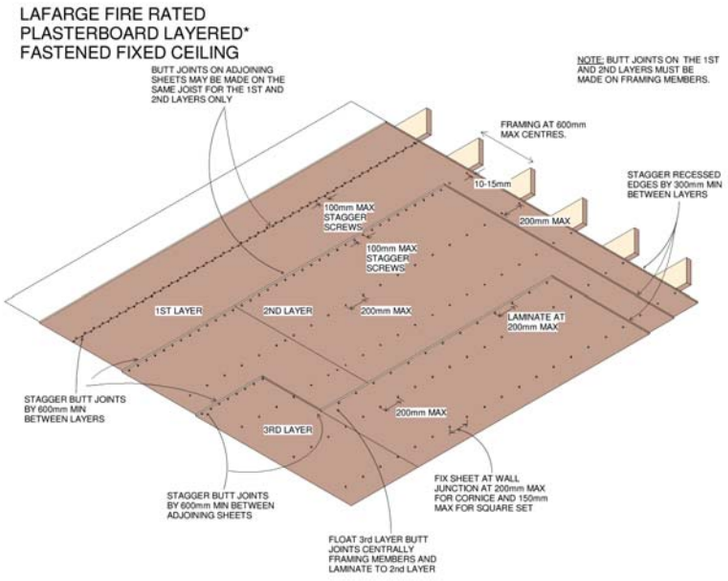
Suspended ceiling to fire resistant wall junction



Fixed Fire Rated Systems

Maximum centre-to-centre distance allowed between the timber supports is 600mm. The size of the timber supports need to be specified by a structural engineer.

Installation details of Plasterboards to the suspended grid or timber supports

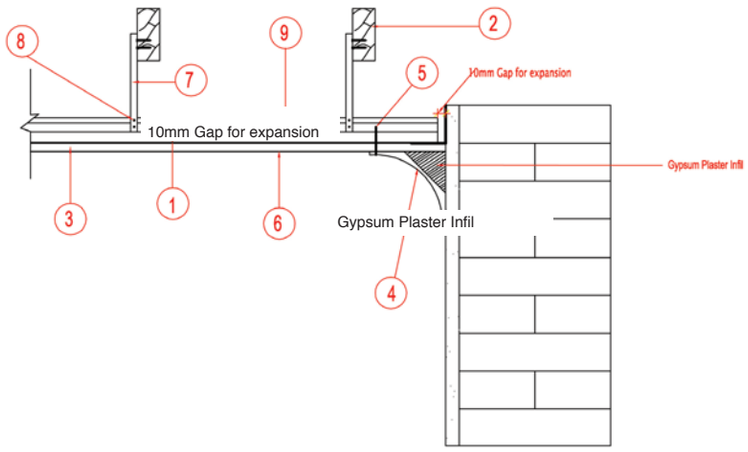


75mm Lafarge Cove Cornice detail for fire property specification

Grid Layout Fire Resistance Plastered Ceiling

1. Plaster Grid
2. Supporting beam
3. 15mm Fire Check Plasterboard
4. Cove Cornice
5. Fixings
6. Plaster to Ceilings
7. 25 x 25 x 0.8mm Galv Angle @ 400mm cts.
8. 4,2 x 13 Wafer Tek Screws.
9. 14kg/m3 100mm Insulation

- Beam size and specifications by others.
- Maximum Suspension 3m.
- Beam lateral support @ 1200 cts.



Lafarge Decorative Mouldings

Lafarge Decorative Mouldings are made of high density moulded polystyrene; these mouldings are extremely durable and will not chip if dropped. Cuts and dents can be filled with utility adhesive, reducing waste significantly.

The Lafarge range of mouldings is water and humidity resistant, making them an excellent choice for bathrooms and humid areas.

While direct heat placed too close to mouldings can damage them, the larger profiles can be used to conceal low voltage fluorescent lighting with a clearance of approximately 5cm.

Product Information:

- High density moulded polystyrene
- Smooth white surface ready for painting
- Available in 2m lengths
- Melting temperature is 80°C
- Non-toxic
- Weight is approximately 8Kg / 100m
- Paint should be acrylic water based PVA paint. Enamel paint can be used but a primer of PVA paint is required.

Storage Information:

- The Lafarge Decorative Mouldings stored in cold or hot conditions should be allowed to stabilize to ambient temperature for about 24 hours in the room or site before installation.
- The mouldings should not be stored in shipping containers as the temperatures inside can exceed 60°C in summer.
- Lafarge Decorative Mouldings expand and contract with the temperature and must be installed tightly.

LAFARGE CORNICE UTILITY ADHESIVE:

Application:

- Substrates must be clean, free of dust and grease.
- Apply a liberal bead of adhesive along top and bottom of cornice.
- Press firmly to hold in position.
- Wipe away excess adhesive with a damp sponge or cloth.
- Keep away from frost.

For fixing polystyrene and polyurethane:

- Excellent adhesive and filling properties.
- Good initial grab.
- Suitable for painting.
- No film formation.

Characteristics:

- Acrylic polymer.
- High initial tack and final bond strength.
- Excellent adhesion to paper and walls.
- Flow properties designed as a paste to be applied with a scraper or spatula.

Board description	Number of layers	Fire Resistance
15mm Fire Check	One layer	30 minutes
15mm Fire Check	Two Layers	60 minutes
15mm Fire Check	Three Layers	120 minutes

Lafarge Ceiling Systems

Specifications:

- Consumption: 70-150gsm
- Glue Spread: 50g/m for small to medium mouldings on new or straight walls.
  100g/m for large mouldings on new or straight walls.
  100g/m for small to medium mouldings on damaged or uneven walls.
  200g/m for large mouldings on damaged or uneven walls.
- Lafarge Cornice Utility Adhesive is available in 310ml tubes and 3kg and 7.5kg buckets.

Dilution of adhesive not recommended

Cleaning of equipment:

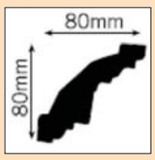
- Clean equipment with water before adhesive dries.
- Dried adhesive can be manually brushed or scraped using hot water.

Storage:

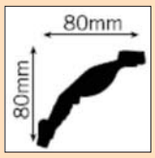
- Store between 15°C and 30°C under dry conditions.
- Unused containers should be tightly sealed.
- Shelf life is approximately 12 months when stored correctly.

Please contact Lafarge Gypsum for first aid measures if required.

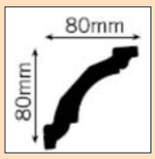
Lafarge Roman

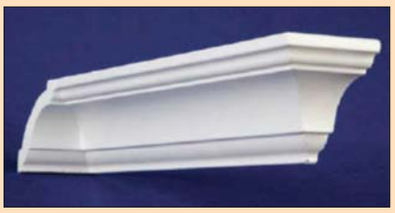


Lafarge Grecian

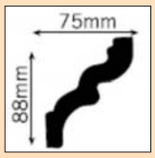


Lafarge Classic

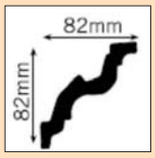




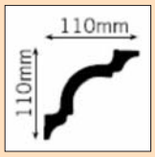
Lafarge NeoClassic



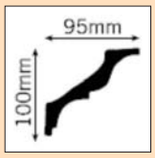
Lafarge Doric

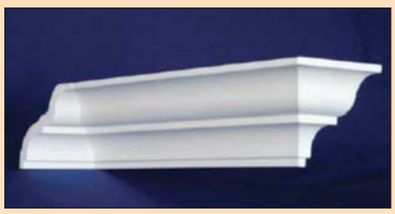


Lafarge Classic 110

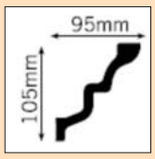


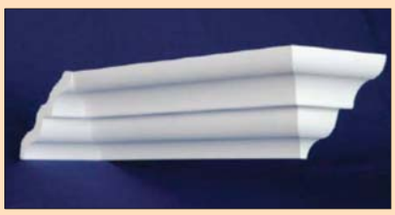
Lafarge Classic 110

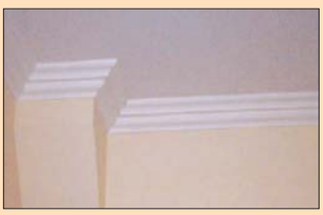




Lafarge Milano

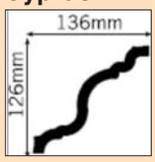




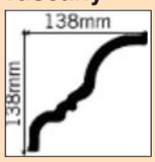


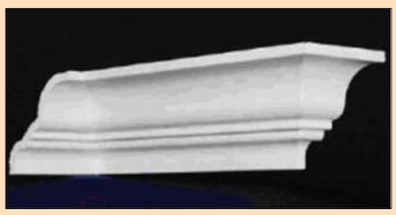
Lafarge Ceiling Systems

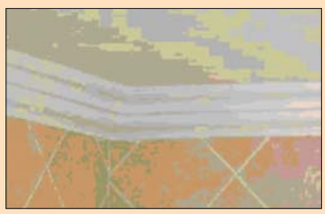
Lafarge Cyprus



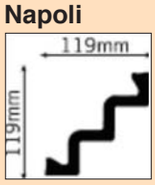
Lafarge Tuscany

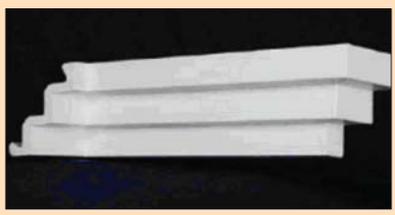






Lafarge Napoli

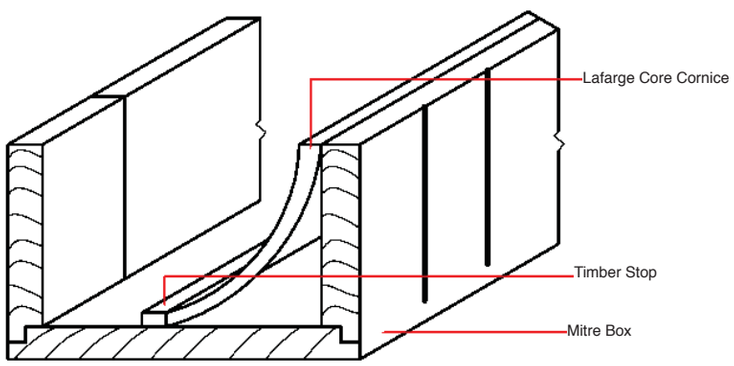




Fixing Instructions for Cornices

Lafarge Cove Cornice:

1. Measure distance down from the ceiling and mark it on several places on the wall. Shoot a chalk line along these marks on the wall. Insert temporary nails at 1 meter intervals just below the chalk line.
2. Fix a timber stop along the base of the mitre box distance from the vertical side. Place the Lafarge Cove Cornice in the mitre box as per below diagram.
3. Using a fine tooth saw; cut and mitre the required lengths of Lafarge Cove Cornice in a mitre box.



4. Guide the Lafarge Cove Cornice over the temporary nails and press firmly into position against the wall and ceiling. Insert temporary nails into ceiling to hold cornice. Fix the cornice at 400mm into the wall and ceiling using steel nails or drill, plug and screw. On painted surfaces a water-based plaster bonding liquid should be applied. Patch imperfections and decorate as you would plasterboard. Alternatively fix the cornice with suitable cornice adhesive.

NB:Always carry cornice on edge.
Note: Cornices are purely decorative and do not contribute in anyway to the structural performance of a building. If excess movement of the roof is expected, fix cornice to the wall only. Fill gaps with cornice adhesive suitable for painting.

Lafarge Decorative Mouldings:

1. Measure distance down from the ceiling and mark it on several places on the wall. Shoot a chalk line along these marks on the wall. Insert temporary nails at 1 meter intervals just below the chalk line.
2. Fix a timber stop along the base of the mitre box distance from the vertical side. Place the Lafarge Decorative Moulding upside down (i.e. the bottom facing upwards) in the mitre box. Please refer to the Lafarge Decorative Mouldings section to ensure that you have the pattern the correct way up.
3. Lafarge Decorative Mouldings should be cut with a fine toothed panel saw or fine hacksaw. This will give a clean edge without damaging the product. Do not cut with a knife or hot wire. Cut and mitre the required lengths of Lafarge Decorative Mouldings in a mitre box. If using patterned cornice, extreme care must be taken to match the pattern where a joint occurs. See “Preparing joints and corner mitres of cornices” section for further details on how to cut and mitre. The Lafarge Decorative Mouldings to be installed should normally be cut slightly longer than actual length required to be installed. This is to give a tight fit to the joints.
4. Spread cornice adhesive along edges and back of moulding and at each end. Use enough adhesive so that the entire surface of the cut edge at each end is covered. All joints must have adequate adhesive for a strong hold.
5. Guide the Lafarge Decorative Moulding over the temporary nails and press firmly into position against the wall and ceiling. The mouldings must be installed on level and firm surfaces. Once glued onto ceiling/ wall, fasten with nails / screws or panel pins especially close to the joints and edges of the moulding for tight and secure fit. Mouldings must be securely fixed at all joints. Should fixings be required, then fixings to be at 300mm centres. Large mouldings required additional support on either the vertical or horizontal surfaces for positive fixing.

Painting Lafarge Decorative Mouldings:

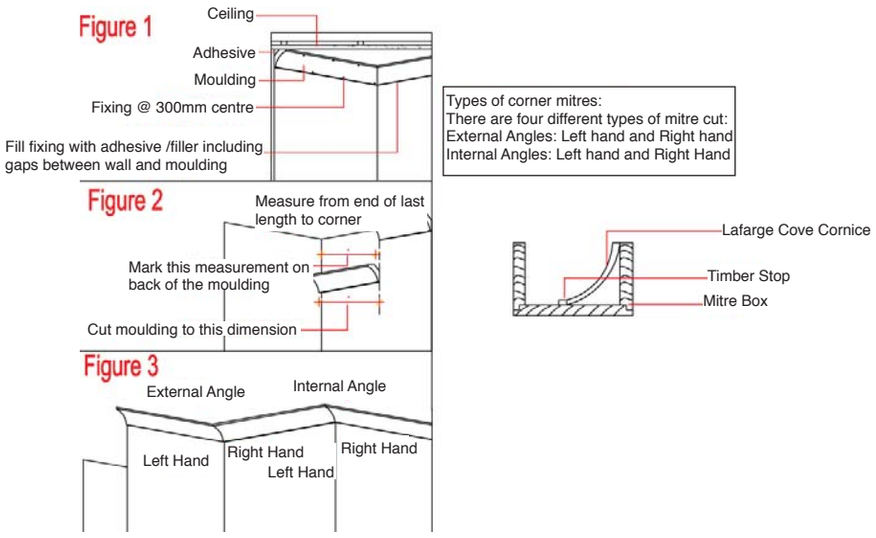
- Polystyrene mouldings can be painted directly with any acrylic water based paint.
- PVA paint would be required before applying any enamel or solvent based paint.
- The mouldings will turn yellow if left unpainted.

Lafarge Ceiling Systems

- It is advisable to apply a base coat to the mouldings before installation.
- Ensure that adhesive touch-ups are sanded level to the moulding profile.
- Paint techniques can be applied to mouldings by specialists.

Preparing Joints and Corner Mitres of Cornices

Types of corner mitres:
There are four different types of mitre cut:
External Angles – Left hand and Right hand
Internal Angles – Left hand and Right hand.



Mitred Joints:

To cut a left hand corner mitre, position the mitre block to the left of the length of cornice and line up the measured mark with the appropriate mitre block slot (depending on whether the angle is to be internal or external). Similarly, position the mitre block to the right of the length of cornice for the right hand corners.

BEFORE STARTING, NOTE WHICH WAY UP THE CORNICE SHOULD BE FITTED

Remember that all marks, measurements and cuts must be made from the back of the cornice's wall edge. When measuring for mitres or butt joints, try to ensure a good pattern match at the meeting edges. This is especially important with external mitres, which are generally more visible. So, whenever a mitre is required, measure the distance between the end of the last fixed length and the corner of the room. Mark this measurement on the back wall edge of the next length of cornice – making sure the pattern matches at each point.

Cutting Cornice:

When using the mitre block, it is a good idea to keep the cornice supported and level using a piece of wood the same thickness as the base of the mitre block. Place the cornice upside-down in the mitre block with the wall edge uppermost, flat against the side, and the ceiling edge flat against the base.

Opening Solutions

Ceiling Access Panels
Maximising Ceiling Space Accessibility

Lafarge Gypsum's innovative new Ceiling Access Panels offer a cost effective, aesthetically pleasing alternative to the conventional gypsum trap doors, ensuring that your trap doors look neat and clean all the time.

Modern and very functional, Ceiling Access Panels are available in three different configurations to cater for your specific requirements:

- Top Hinged
- Bottom Hinged
- Lay in


Top Hinged


Bottom Hinged




Lay in

Benefits

Lafarge Gypsum's quality Ceiling Access Panels guarantee a long lifespan. Time-saving and easy to install, the panels come complete with fully detailed fixing instructions for quick on site installation.

Due to the powder coated finish, ceiling access panels are easy to clean - making unsightly finger marks, that are prevalent on conventional gypsum trap doors, a thing of the past. aesthetically superior to gypsum trap doors, they offer a neat, clean finish to ceilings

T-Frames

"T" Section Centre Line Ceiling modular grids are commonly used for conventional trapdoor frames in plastered ceilings.
They can also be used for light fittings.

These grids are available ex-stock in the following sizes and finishes:
600 x 600 Natural Anodised
600 x 600 White
1200 x 600 Natural Anodised
1200 x 600 White

Configurations

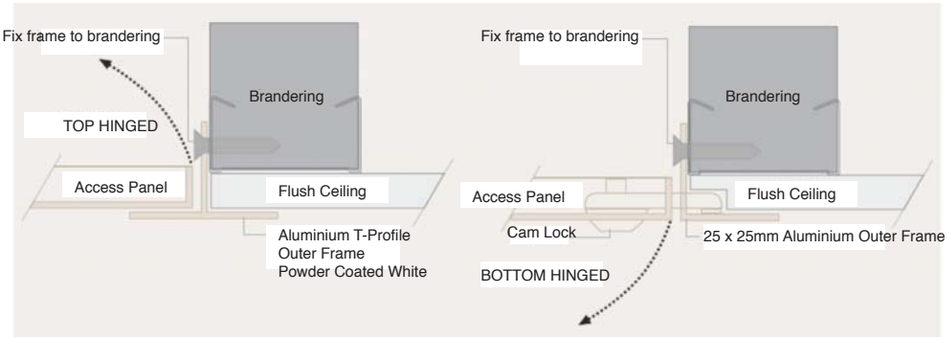
Modern and very functional, Lafarge Gypsum Ceiling Access Panels are available in three different configurations to cater for your specific needs.

Top Hinged | Bottom Hinged | Lay In

Specifications

Allow extra over ceiling for Ceiling Access Panel comprising 635 x 635mm white epoxy coated aluminium T-frame with 580 x 580mm white epoxy coated steel pan in a [Top hinged / Bottom hinged / Lay-in] option as supplied by Lafarge Gypsum fitted flush to ceiling with and including screw fixing through stalk of T-frame into 38 x 38mm softwood/steel brandering/supporting sub-frame.

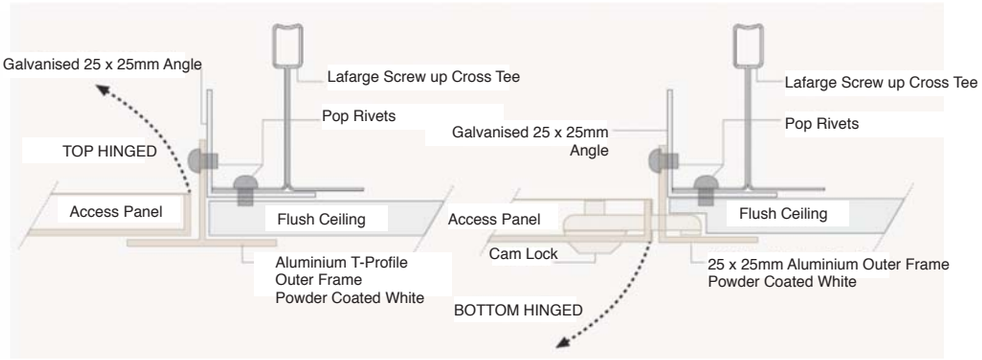
Flush Plaster Timber or Steel Branded Ceilings



Typical 3 Dimensional Steel Branding Construction Detail

Typical Joint Detailfor 6,4mm Plasterboard

Flush Plaster Steel T-Suspension Ceilings



ecospecifier global

Product Assessment Certificate

This is to confirm that the following product has been assessed and met the criteria for inclusion on ecospecifier.co.za. In addition, a Green Building Scheme Pre-Assessment has been conducted and found this product is likely to contribute to the achievement of Green Building rating tool credits.

COMPANY **Lafarge Gypsum**

PRODUCT **Lafarge® Jointing Plater, Finishing Plaster, Skim Lite, Skim Stone [ECG-Premium]**

VALID TO 13/01/2013

REF NO. LFIVN001-2012

ecospecifier's role is:

- ✓ To provide a third party, independent and unbiased assessment of information provided by manufacturers and other sources.
- ✓ To assess products using known South African and International Standards, independent test data, third party research and expert opinion.
- ✓ To determine if products are eco and health preferable based on the premise that:
  - they exhibit one or more eco or health preferable characteristic compared to other products in their category; or
  - they are a member of a product category that is in itself an eco or health preferred category; and
  - they do not contain 'significant' ecological or health damaging content.
- ✓ To ensure that products meet **eco**specifier's assessment methodology.

Certified by **eco**specifier Pty Ltd per

David Baggs | Technical Director & Principal Consultant
Chartered Architect, FAIA, ABSA, Green Star AP, LEED AP, MRoySocAS

www.ecospecifier.co.za

ecospecifier global

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COMPANY **Lafarge Gypsum**

PRODUCT **Lafarge® Vinyl Ceiling Tiles [ECG-Premium]**

VALID TO **03/02/2013**

REF NO. LFIVN002-2012

ecospecifier's role is:

- ✓ To provide a third party, independent and unbiased assessment of information provided by manufacturers and other sources.
- ✓ To assess products using known South African and International Standards, independent test data, third party research and expert opinion.
- ✓ To determine if products are eco and health preferable based on the premise that:
  - they exhibit one or more eco or health preferable characteristic compared to other products in their category; or
  - they are a member of a product category that is in itself an eco or health preferred category; and
  - they do not contain 'significant' ecological or health damaging content.
- ✓ To ensure that products meet **eco**specifier's assessment methodology.

Certified by **eco**specifier Pty Ltd per

David Baggs | Technical Director & Principal Consultant
Chartered Architect, FAIA, ABSA, Green Star AP, LEED AP, MRoySocAS

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Product Assessment Certificate

This is to confirm that the following product has been assessed and met the criteria for inclusion on ecospecifier.co.za. In addition, a Green Building Scheme Pre-Assessment has been conducted and found this product is likely to contribute to the achievement of Green Building rating tool credits.

COMPANY **Lafarge Gypsum**

PRODUCT **Lafarge® Plasterboard [ECG-Premium]**

VALID TO **15/09/2012**

REF NO. 10101232A

ecospecifier's role is:

✓ To provide a third party, independent and unbiased assessment of information provided by manufacturers and other sources.

✓ To assess products using known South African and International Standards, independent test data, third party research and expert opinion.

✓ To determine if products are eco and health preferable based on the premise that:

- they exhibit one or more eco or health preferable characteristic compared to other products in their category; or
- they are a member of a product category that is in itself an eco or health preferred category; and
- they do not contain 'significant' ecological or health damaging content.

To ensure that products meet **eco**specifier's assessment methodology.

✓

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LAFARGE