

Working Drawing

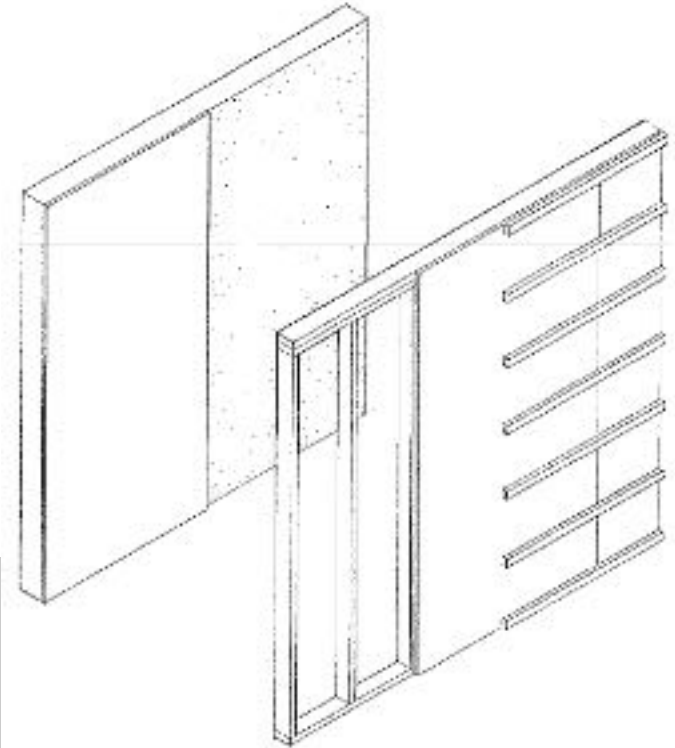
Interior wall cladding

Working Staff

Introduction

- Interior finish consists mainly of the coverings of the rough walls, ceilings, and floors, and installing doors and windows with trim and hardware
- Wall finishes provide a decorative skin to conceal building components including structural members, insulation, ductwork, pipes, and wires.
- Good wall finishes are plumb and straight. Surfaces may be smooth or textured and better wall finishes are durable. Some wall finishes are versatile, taking decorative finishes such as stain, paint or wallpaper readily.
- Walls may make a decorating statement, or may be simply background.
- In some cases, the combustibility of wall finishes may be an issue. In kitchens and bathrooms, resistance to water damage is an asset. Interior walls should be resistant to wear and be cleanable.

Rigid finish materials capable of spanning short distances may be applied to a supporting grid of linear members. More flexible finish materials, on the other hand, require a solid, rigid backing. Additional technical factors to consider include the acoustic qualities, fire resistance, and thermal insulation value of a finish material.



Surface finishes have a critical influence on the aesthetic qualities of a space. In the selection and use of a finish material, we should carefully consider its color, texture, and pattern, and the way it meets and joins with other materials. If a finish material has modular characteristics, then its unit dimensions can be used to regulate the dimensions of a wall, floor, or ceiling surface.

Types of interior wall finishes

- **Wood Panelling**

It is a decorative treatment done with wooden panels on the walls in various designs. The material used can be plywood or wood covered with veneer or laminate.



- **Cement plastered Finish**

It is prepared in the form of mortar with cement, sand and water in proper proportions and applied on masonry manually to achieve a smooth finish or sand faced finish.



- **Coral Finish**

Coral finish is similar to Plaster of Paris Finish and Gypsum Plaster Finish. Coral is the name of a type of plastering material. It gives a rough edgy finish.



Types of interior wall finishes

- **Laminate Finish**

Laminate comes in various colors and designs. It comes in the form of sheet and is pasted with fevicol on Plywood.



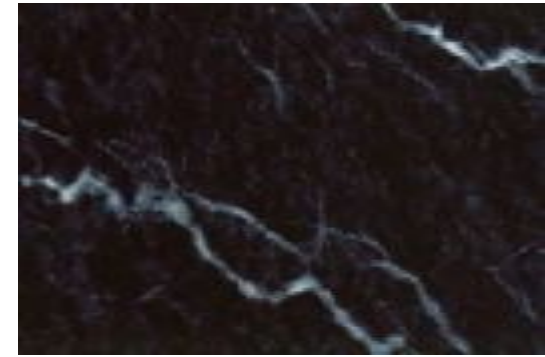
- **Tile Cladding**

Different tiles, for example, granite, marble, glazed tiles or vitrified tiles are used for tile cladding. Tiles are available in a variety of colours and shapes. The selection of tiles depends on the place where it is to be applied i.e. interior facade or exterior facade.



- **Marble Powder Finish**

This is a very smooth finish. The finish looks like Marble flooring. This finish is obtained by mortar of marble powder, white cement and water. It is applied manually.



- **Sand Textured Finish**

Sand Textured finish is used to give fine texture to the wall. This wall finish is not very commonly used because of its grains coming out.



- **Canfor Finish**

Canfor finish is also known as Faux finish. This material is used for the interiors of residences. It adds a unique aesthetic appeal to the place. It comes in 6mm thickness and in different designs.

This finish is chosen when a false finish is to be given. It gives a stone wall or brick wall effect.



- **Pebbles Finish**

This a very simple and attractive finish obtained by pasting small pebbles on the walls with cement mortar as an adhesive.

Pebbles finish is usually preferred for exterior facade. It is also commonly used to give nice flowing effect to the waterfalls that are created especially designed for Hotel Interiors or as a part of Exterior Landscaping.



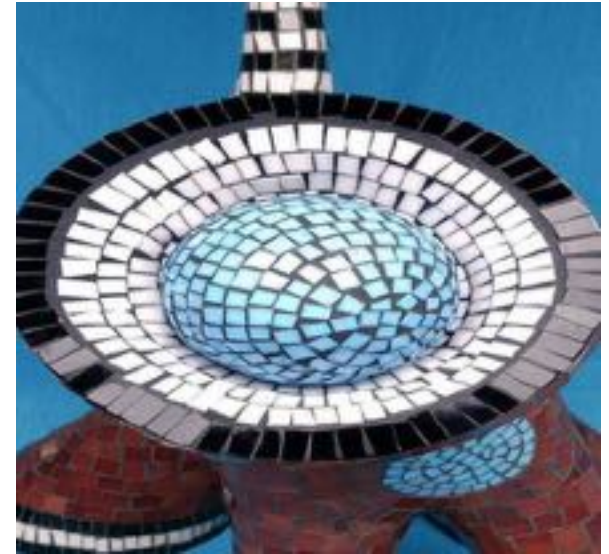
- **Plaster of Paris Finish**

Plaster of Paris or simply plaster is a type of building material based on calcium sulphate hemihydrates. This is a smooth finish achieved by plaster of Paris generally applied on internal walls.



- **Glass Mosaic Finish**

Glass mosaic tiles are small 1”x1” on a cloth to get a workable size 12”x12” and this tile is pasted with an adhesive on wall surfaces. It can also be pasted on curved surfaces. It comes in different colours and generally used in swimming pools.



- **Gypsum Plaster Finish**

This just like plaster of Paris finish but gypsum based material is used to prepare mortar. It is more durable and finer as compared to Plaster of Paris Finish.



- **Designer Mirror Finish**

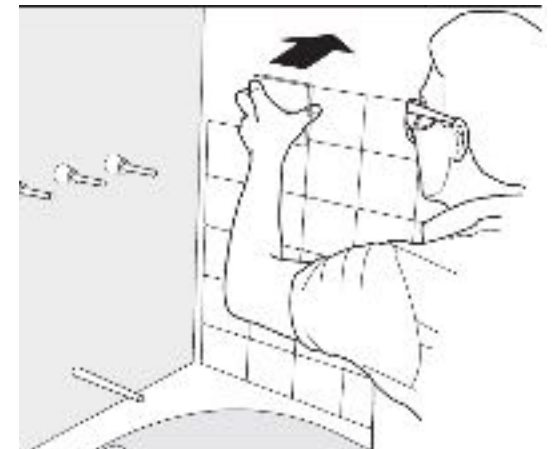
Designer mirrors are obtained by small pieces on walls to create mural like design.

- **Gypsum Board**

Gypsum board is the generic name for a family of panel products that consist of a noncombustible core, composed primarily of gypsum, and a paper surfacing on the face, back and long edges

- **Cement Board**

Cement Board offers a strong, water-durable base for ceramic and stone tile in tub and shower areas.



Types of interior wall finishes which required in students' projects:

1. Wooden panel
2. Gypsum Board
3. Cement board

1. Wooden panel

This panel is comprised of reinforced wood fibres and thermosetting resins which when manufactured under very high pressure and heat produce a homogenous, non porous and extremely strong material. The surface of compact laminate is achieved through a decorative paper impregnated with melamine which gives it an extremely high wear and scratch resistant property.

Panel Specifications

Sheet Size - Panels are custom fabricated to meet the design needs of each project's requirements. Maximum size 51" x 120"

Thickness - 8 mm (.31")



PHYSICAL/STRUCTURAL PROPERTIES	Soft, rather brittle and light in weight
MOISTURE CONTENT	30% + for green, 12 - 18% K.D
TYPICAL APPLICATIONS	External and internal cladding, decking and saunas
DENSITY	330 - 390kg/m ³
WASTAGE ALLOWANCE	10 - 15%
ORIGIN	Pacific North West, predominantly Canada
DURABILITY	Class 2 durability, confirming to BS 8417
ENVIRONMENTAL CREDENTIALS	PEFC or CSA available
STORAGE ADVICE	Kiln dried material should be kept undercover, green can be kept outside
SUPPLIED FINISH	Sawn or machined to profile
WORKING PROPERTIES	Machines and takes fixings well, however stainless or galvanised nails should be used to avoid corrosion
STABILITY	Very low shrinkage factor, very resistant to warping, twisting and checking

Additional specifications, sizes, chain of custody and specials are available to order



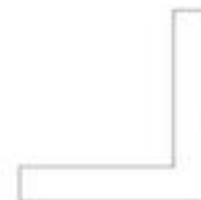
PTGV Patt M040 - 3/4" x 4"



Shiplap Patt 191 - 1" x 6"



PTGV Patt IT - 19-M2 - 1" x 6"



L Shape Corner



Wooden panel Fastening Systems



Open Reveal

The "open reveal" system features a 1/4" channel at all joint areas. Perfect for the designer looking for a flush system with elegant detailing.

Available in satin, black, gold and bronze finish.



Captured

The "captured system" features a closed edge. It is ideally suited for hospitals and other high traffic applications where cleanliness is of utmost concern.

Available in satin, black, gold and bronze finish.



Shadowline

The "shadowline system" features a narrow edge and joint reveal that creates a slight shadow between the panels and the extrusion for a subtle, upscale look.

Available in satin, gold, black and bronze finish.



Visible Mechanical Fastening

Fixed point

Fixed points are used for uniform distribution (halving) of the expansion and shrinkage movements.

Edge spacing

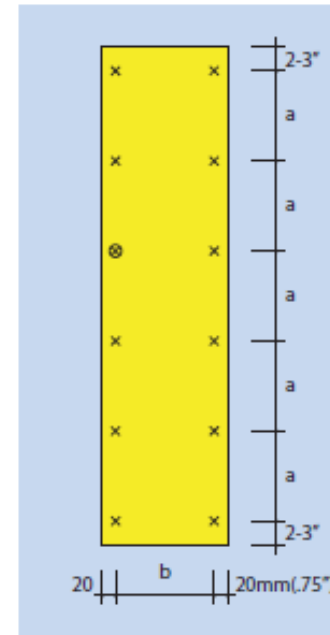
For reasons of stability and flatness, the edge spacing must be kept to without fail. The joints must be made at least 8 mm (5/16") wide so that changes in size can take place without hindrance.

Fastening Spacing

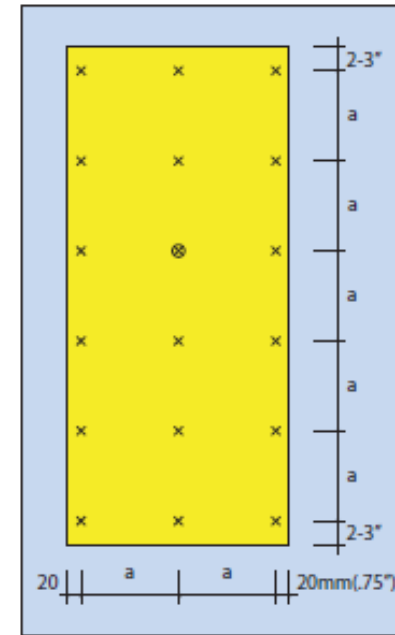
These are to be chosen in accordance with the structural engineering requirements (calculations) or, if this is not necessary due to the local regulations, according to the following table. In the edge region of the construction, the spacing of the fastenings are to be chosen smaller than in the central region (pressure, suction).

For installation with mechanical fastenings

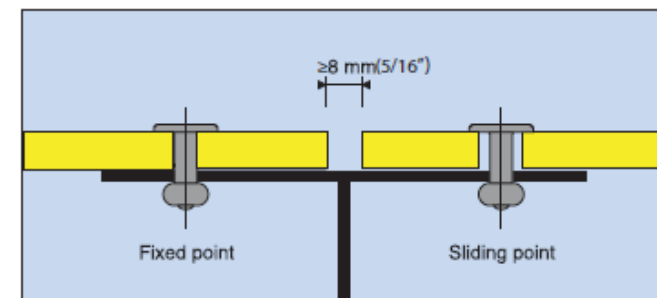
Panel thickness	Maximum fastening spacing "b" Single span panel	Maximum fastening spacing "a" Double span panel
6 mm	400mm (16")	500 mm (19")
8 mm	600 mm (24")	700mm (28")
10 mm	700 mm (28")	850 mm (34")



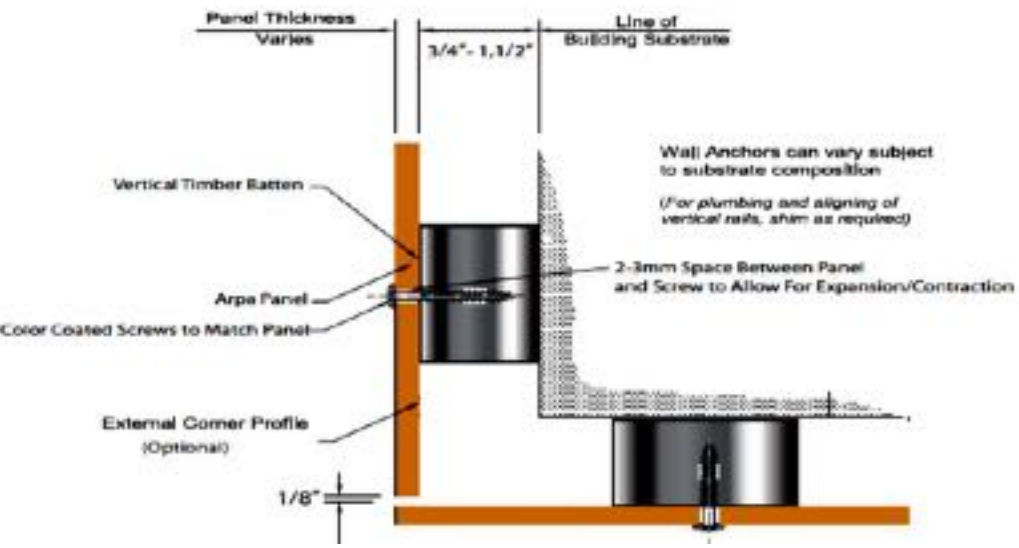
Single span panel



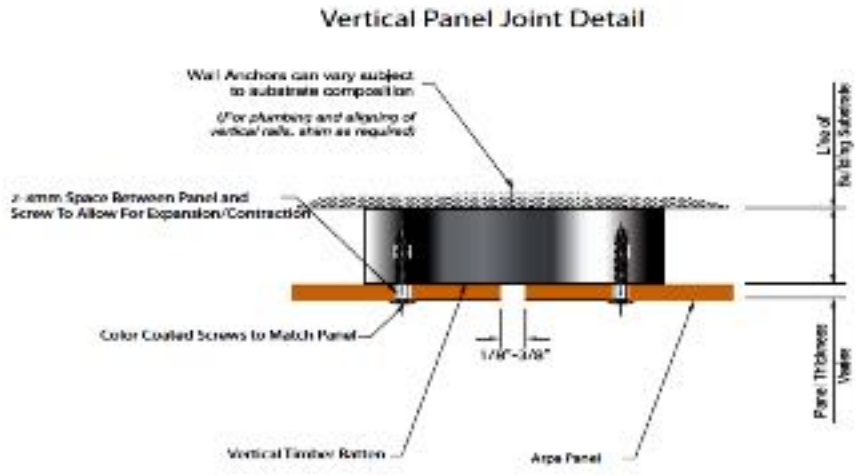
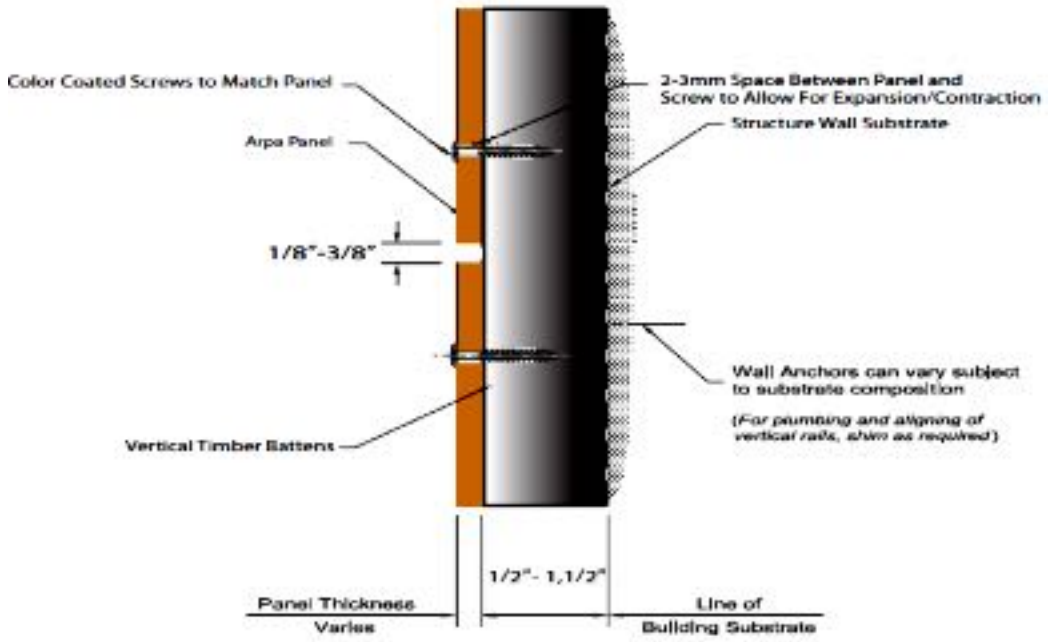
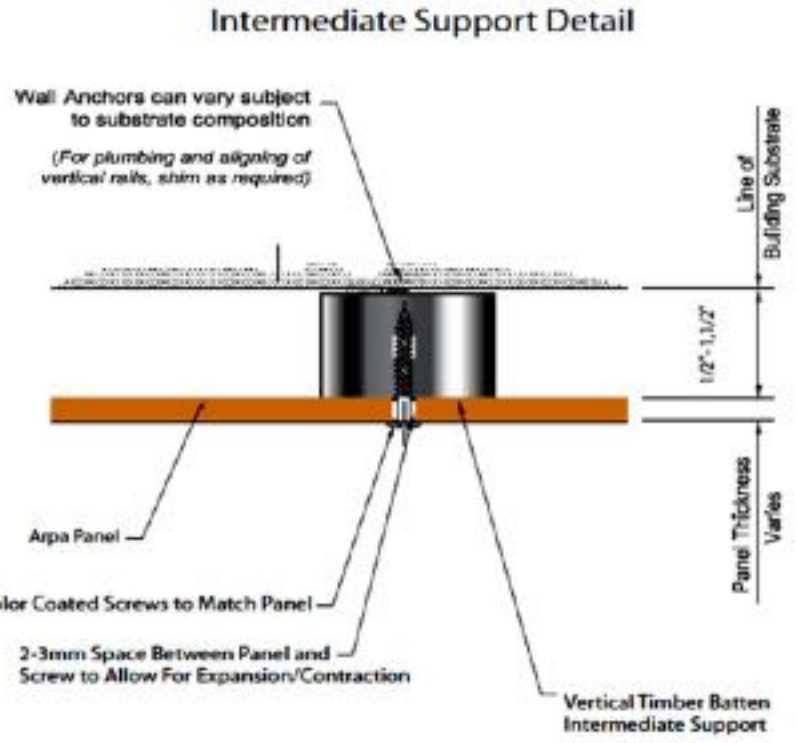
Double span panel



Example of vertical joint



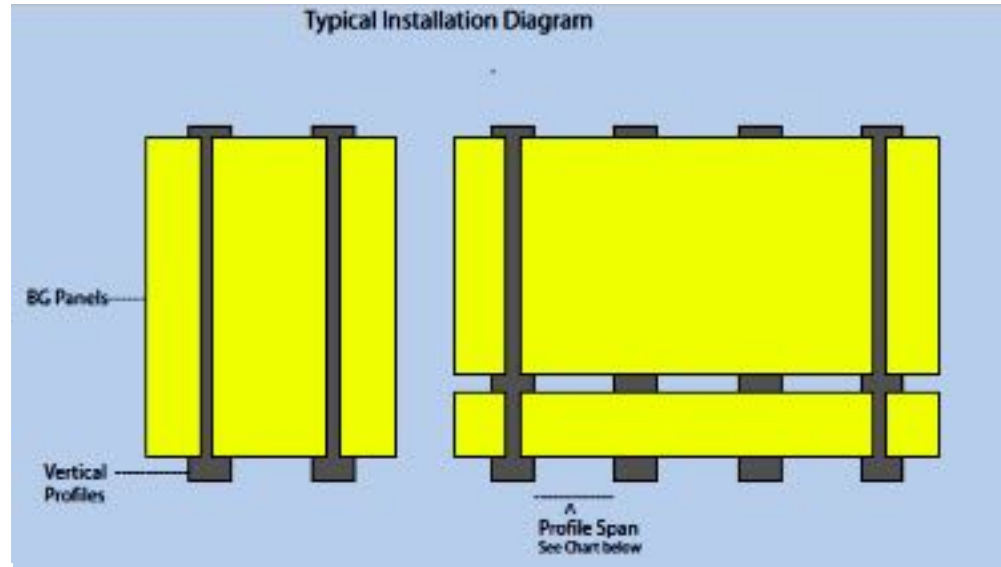
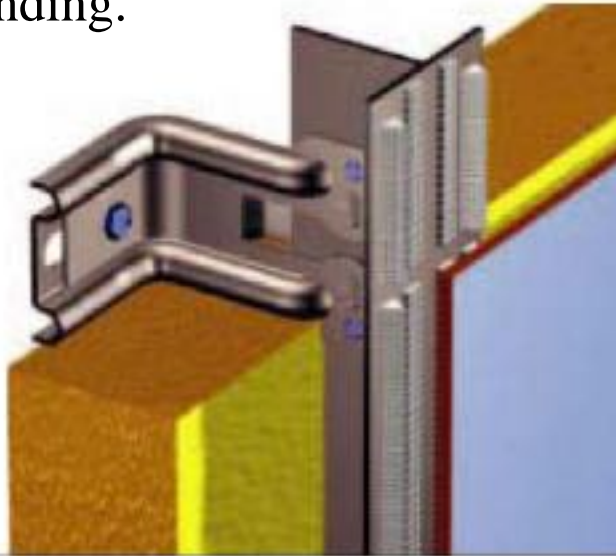
Horizontal Joint Detail



Vertical Panel Joint Detail

Non Visible Adhesive Fastening

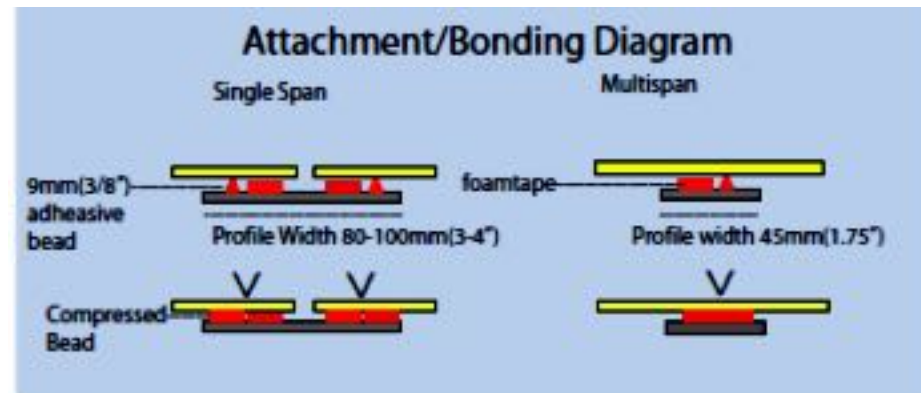
An alternative to fastening with mechanical means is gluing with the adhesive and tape gluing system. works on normal planed wood or aluminium subconstructions. Gluing is a clean and simple solution for vertical wall panel systems, ceilings reveals and much more. the adhesive manufacturer must be strictly complied with to ensure proper bonding.



Required profile span for adhesive application

For glued installation with adhesive (spacing of the vertical support construction)

Panel thickness	Maximum fastening spacing Single span panel	Maximum fastening spacing Double span panel
6 mm (1/4")	450 mm (18")	550 mm (22")
8 mm (5/16")	600 mm (24")	650 mm (26")
10 mm (3/8")	650 mm (26")	650 mm (26")



WOOD WALL PANEL SYSTEM

DEMOUNTABLE Z-CLIP

COMPONENTS & WALL FASTENERS



WOOD REVEAL
(24W121xxx)



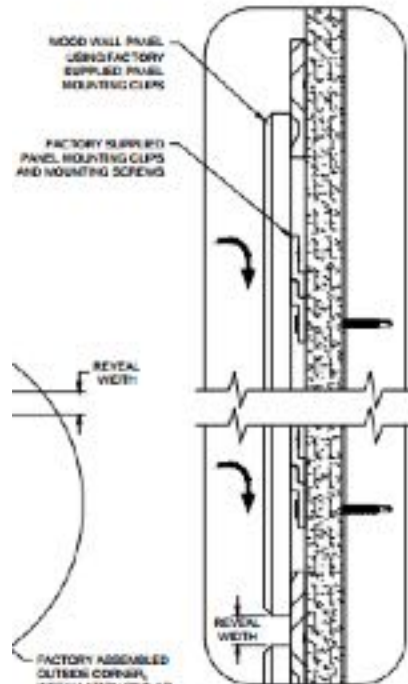
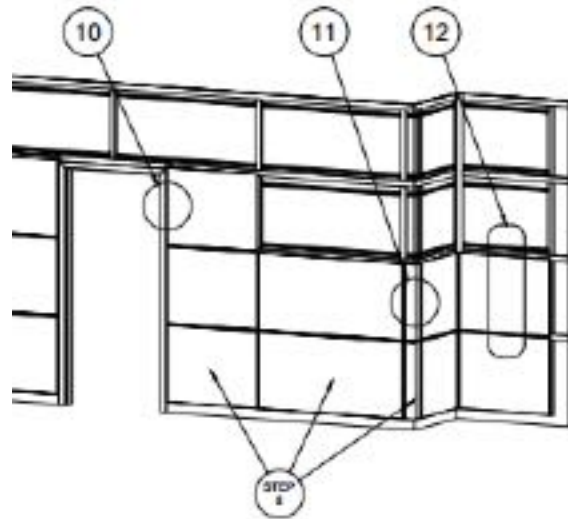
PANEL MOUNTING CLIP
(21P004000)



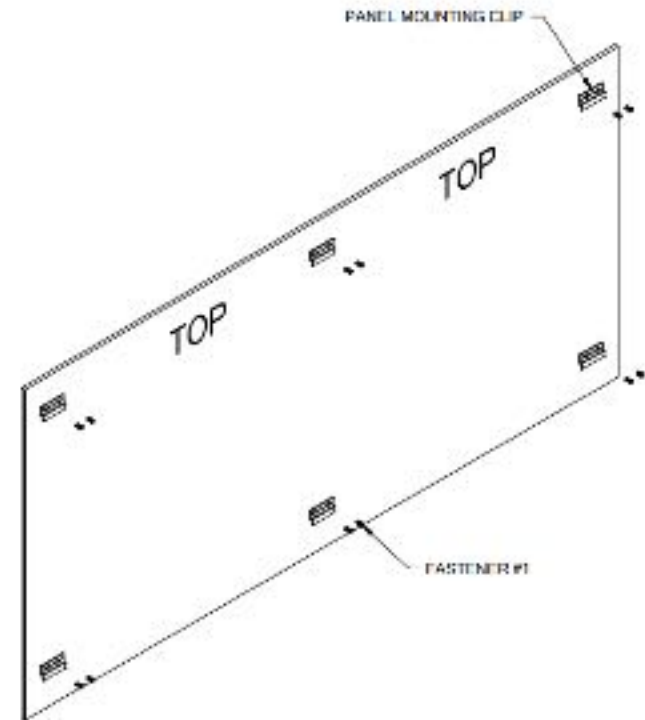
WALL MOUNTING CLIP
(21A005000)

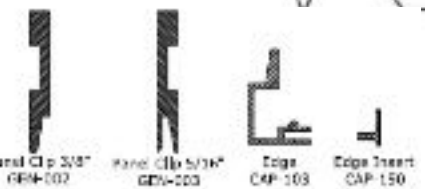
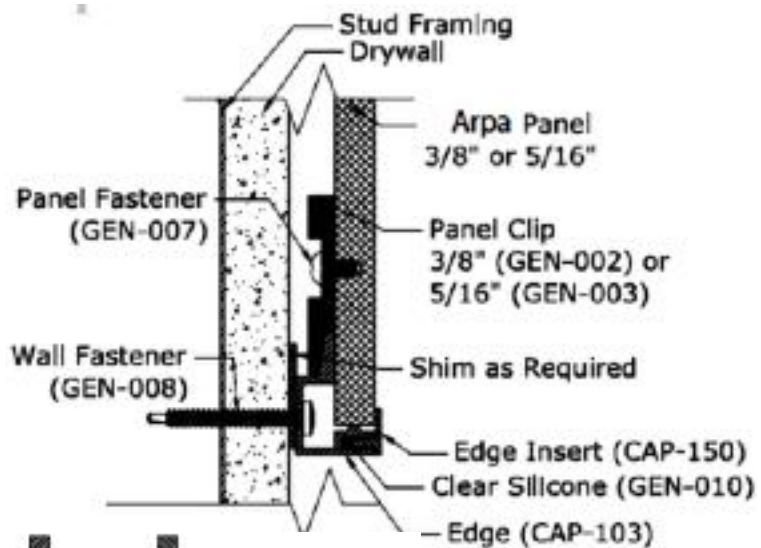


FASTENER #1
6.3mm X 10.5mm
EURO SCREW
(90H467002)

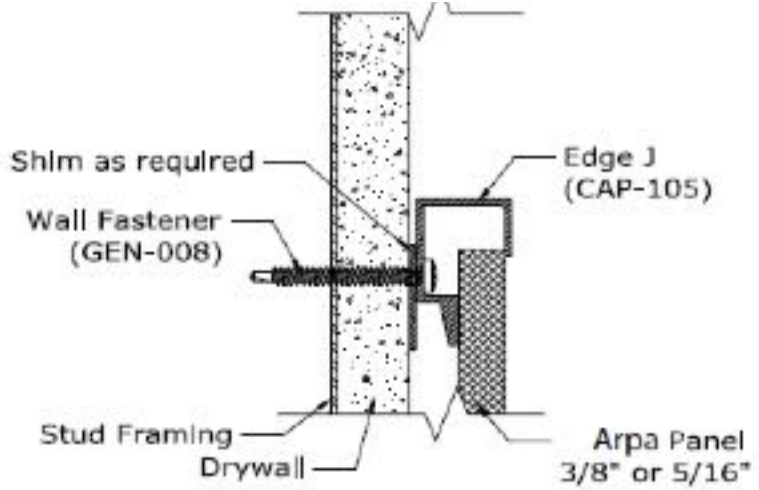


12 TYPICAL MOUNTING OF WALL PANEL

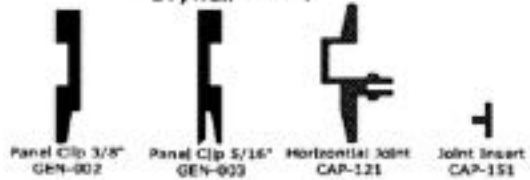
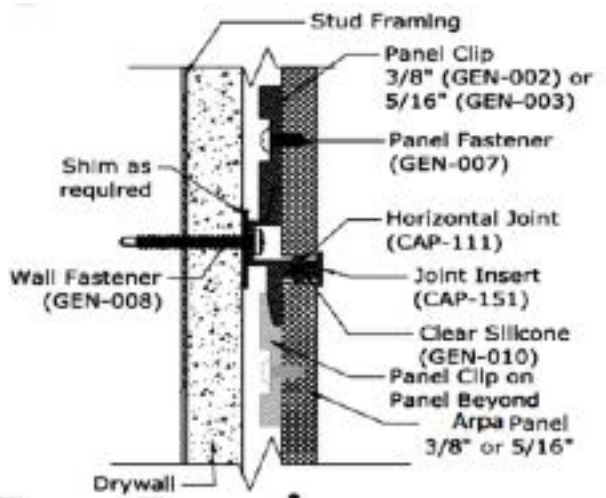




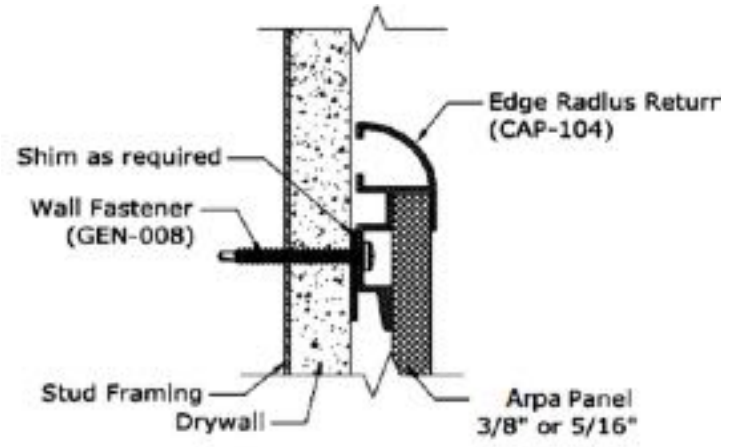
Bottom Edge Detail



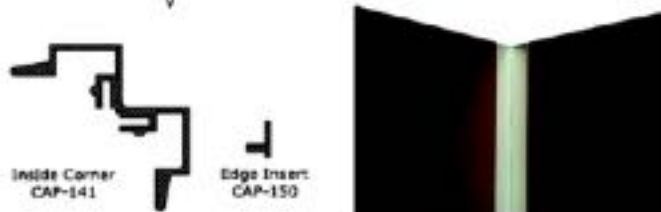
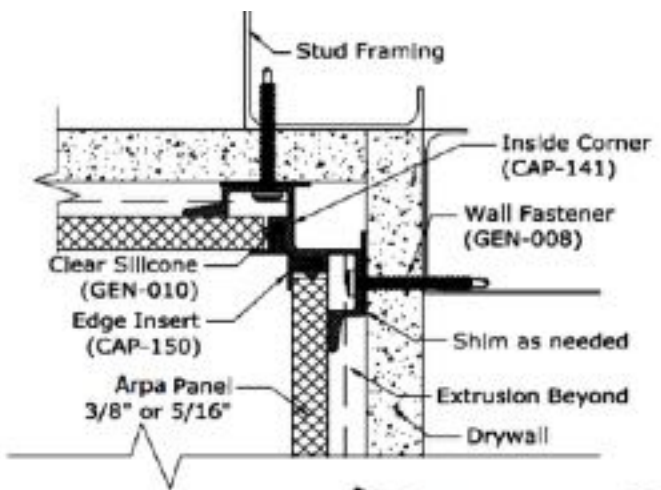
Captured Edge - J



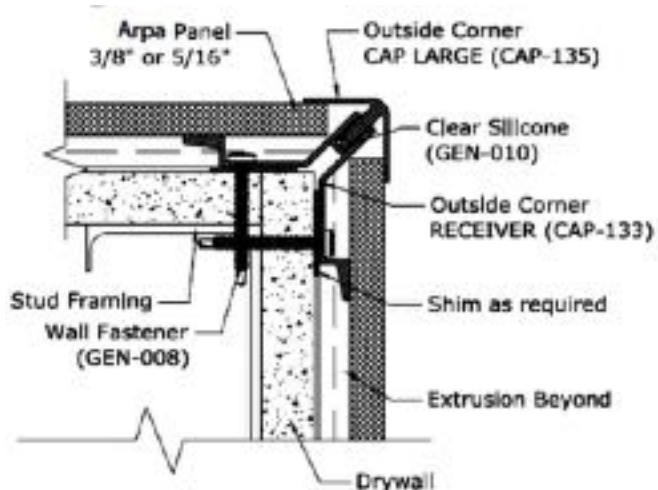
Horizontal Joint Detail



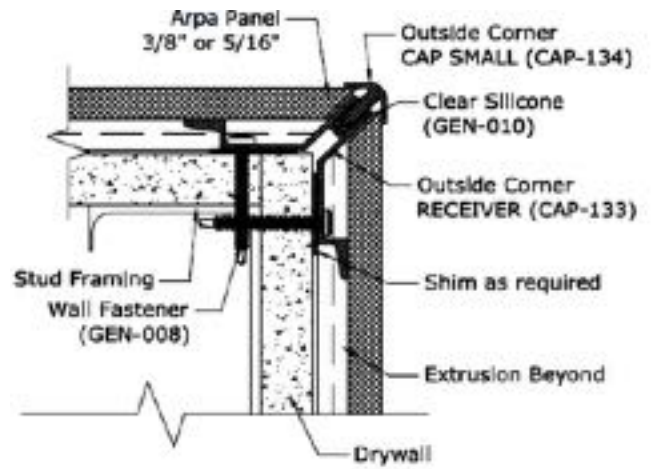
Captured Edge - Radius



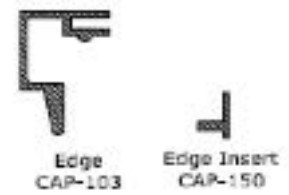
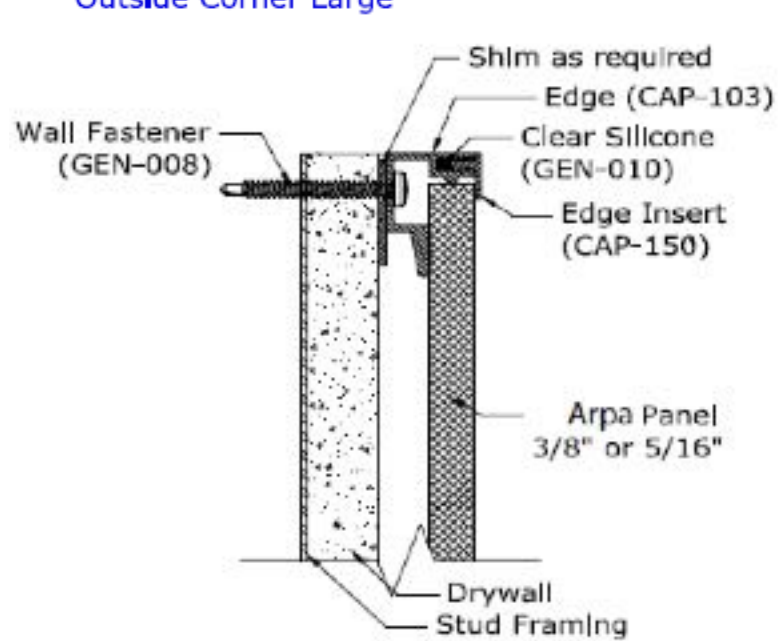
Inside Corner Detail



Outside Corner Large



Outside Corner Small

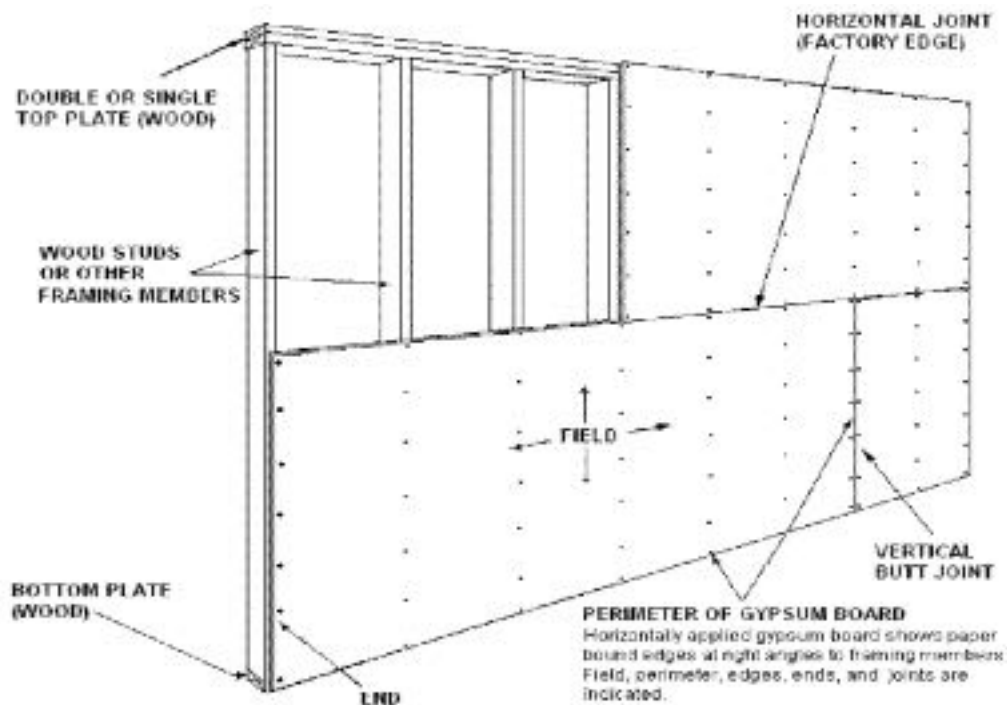


Top Edge Detail

2. Gypsum Board

Gypsum board is one of several building materials covered by the umbrella term “gypsum panel products.” All gypsum panel products contain gypsum cores; however, they can be faced with a variety of different materials, including paper and fiberglass mats.

Gypsum board is often called drywall, wallboard, or plasterboard. It differs from other panel-type building products, such as plywood, hardboard, and fiberboard, because of its noncombustible core and paper facers. When joints and fastener heads are covered with a joint compound system, gypsum wall board creates a continuous surface suitable for most types of interior decoration.



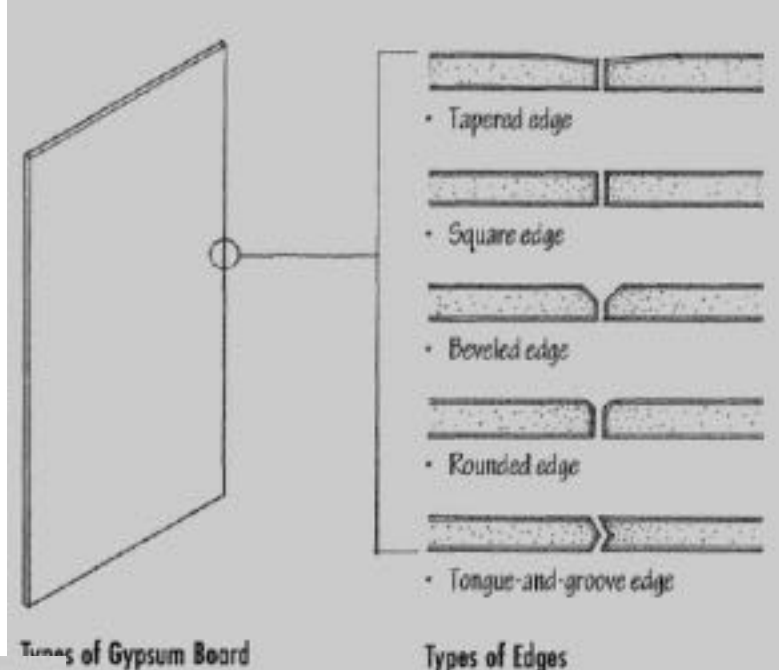
Standard size gypsum boards are 48 inches wide and 8, 10, 12 or 14 feet long. The 48 inch width is compatible with standard framing methods in which studs or joists are spaced 16 inches and 24 inches o.c. (Other lengths and widths of gypsum board are available from the manufacturer on special order.)

THICKNESS	TYPICAL USES
1/4" (6.4 mm)	remodeling, double layer walls, curved surfaces, sound attenuation systems
5/16" (7.9 mm)	manufactured housing walls and ceilings
3/8" (9.5 mm)	remodeling, base for rigid panels, double layer walls/ceilings, curved surfaces
1/2" (12.7 mm) & 5/8" (15.9 mm)	any interior and some protected exterior uses
3/4" (19.0 mm) 1" (25.4 mm)	interior walls; shaft walls, area separation walls, party walls, fire walls, stairways, duct enclosures

WIDTH, in. (mm)		24 (610)	24 (610)	24 (610)	24 (610)	48 (1220)	48 (1220)	48 (1220)	48 (1220)	48 (1220)	48 (1220)	54 (1370)
LENGTH, ft (mm)		8 (2440)	9 (2745)	10 (3050)	12 (3660)	8 (2440)	9 (2745)	10 (3050)	12 (3660)	14 (4270)	16 (4880)	12 (3660)
THICKNESS²	1/4" (6.4 mm)					•	•	•				
	5/16" (7.9 mm)					•	•	•	•			
	3/8" (9.5 mm)					•	•	•				
	1/2" (12.7 mm)					•	•	•	•	•	•	•
	5/8" (15.9 mm)					•	•	•	•	•	•	•
	3/4" (19.0 mm)	•	•	•	•	•	•	•	•			
	1" (25.4 mm)	•	•	•	•							

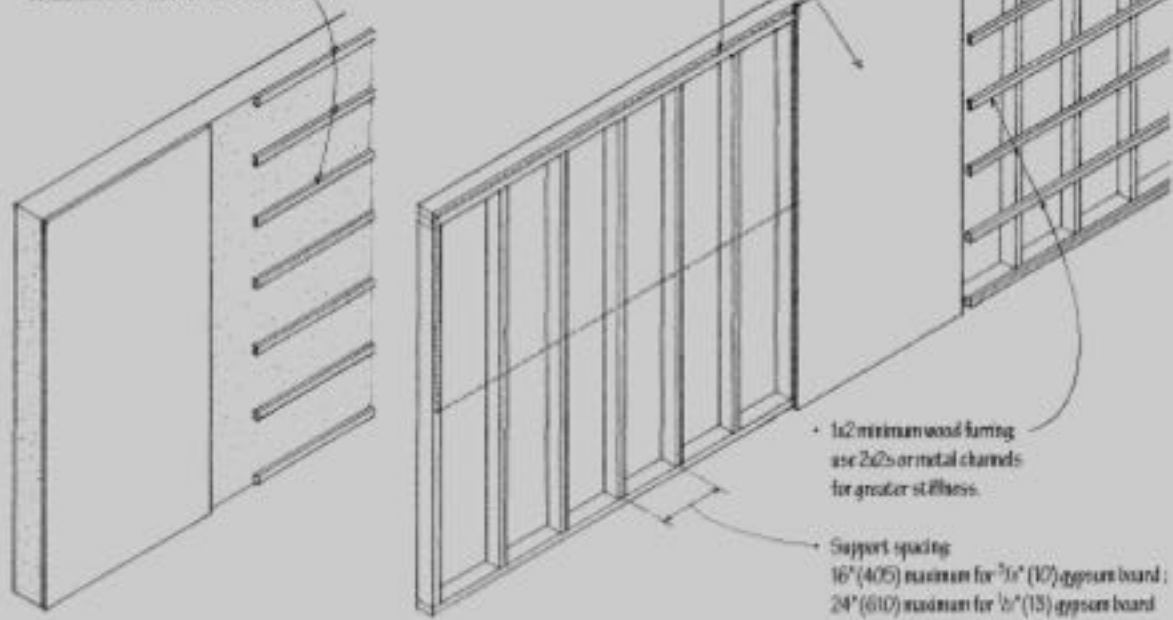
1 Not all types of gypsum panel products are available in all lengths, widths, and thicknesses.

- Edges available are rounded, tapered, beveled, square edge, and tongue and groove (V-edge).



• Exterior and below-grade masonry or concrete walls require furring before the application of gypsum board to eliminate the capillary transfer of water and to minimize condensation on interior wall surfaces.

• Vertical application: board length parallel to furring
 • Horizontal application: board length perpendicular to furring



Regular Wallboard

- Tapered edge
- 4' (1220) wide, 8' to 16' (2440 to 4875) long
- $\frac{1}{4}$ " (6) board is used as the base layer in sound-control walls; $\frac{3}{8}$ " (10) board is used in multilayer construction, and for remodeling projects; $\frac{1}{2}$ " and $\frac{5}{8}$ " (13 and 16) boards are for single-layer construction.

Coreboard

- Square or tongue-and-groove edge
- 1" (25) thick
- 2' (610) wide, 4' to 16' (1220 to 4875) long
- Used to line elevator shafts, stairways, and mechanical chases, and as a base in solid gypsum partitions

Foil-Backed Board

- Square or tapered edge
- $\frac{3}{8}$ ", $\frac{1}{2}$ ", $\frac{5}{8}$ " (10, 13, 16) thick
- 4' (1220) wide, 8' to 16' (2440 to 4875) long
- Aluminum-foil backing serves as a vapor retarder and as a reflective thermal insulator when the foil faces a $\frac{3}{4}$ " (19) minimum dead air space.

Water-Resistant Board

- Tapered edge
- $\frac{1}{2}$ ", $\frac{5}{8}$ " (13, 16) thick
- 4' (1220) wide, 8' to 12' (2440 to 3660) long
- Used as a base for ceramic or other nonabsorbent tile in high-moisture areas

Type-X Board

- Tapered or rounded edge
- $\frac{1}{2}$ ", $\frac{5}{8}$ " (13, 16) thick
- 4' (1220) wide, 8' to 16' (2440 to 4875) long
- Core has glass fibers and other additives to increase its fire-resistance; available with foil backing.

Prefinished Board

- Square edge
- $\frac{5}{16}$ " (8) thick
- 4' (1220) wide, 8' (2440) long
- Vinyl or printed paper surface in various colors, patterns, and textures

Backing Board

- Square or tongue-and-groove edge
- $\frac{3}{8}$ ", $\frac{1}{2}$ ", $\frac{5}{8}$ " (10, 13, 16) thick
- 4' (1220) wide, 8' (2440) long
- Used as the base layer in a multilayer assembly for increased rigidity, sound insulation, and fire resistance; available with regular or Type-X cores, or with foil backing

Sheathing Board

- Square or tongue-and-groove edge
- $\frac{1}{2}$ ", $\frac{5}{8}$ " (13, 16) thick
- 2' or 4' (610 or 1220) wide, 8' to 10' (2438 to 3048) long
- Has a fire-resistant core and faced with a water-repellent paper for use as exterior sheathing; available with regular or Type X-cores