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Drywall and Veneer Plaster Products

Since their introduction over 60 years ago, SHEETROCK Brand Gypsum Panels from CGC have dominated the drywall industry and have become the standard for quality interior walls and ceilings. With the addition of veneer plaster bases and finishes, CGC has the nation's largest-selling, broadest line of gypsum products with the highest quality and the best performance.

The gypsum products described in this chapter conform to product standards recommended by CGC and most applicable ASTM, government and commercial standards. These materials meet the essential requirements of economy, sound isolation, workability, strength, fire resistance and ease of decoration which are characteristic of quality construction.

CGC continues to be at the forefront of technological advances in the industry. In recent years, the company's research and development staff has produced a series of materials that offer exceptional strength and durability. Those materials now are commercially available as abuse-resistant products and systems. These systems were initially developed for government buildings, commercial construction, schools, prisons and other structures where walls and ceilings are subject to exceptional traffic, and abusive wear and tear. They now also provide longer lasting quality in typical commercial and residential construction. You will find information on abuse-resistant products and systems throughout this text.

Our sales and technical representatives are ready to consult with tradespeople, contractors, architects, dealers and code officials on gypsum products and systems, and their application to individual job problems and conditions. For more in-depth information, contact your nearest CGC sales office or our website (http://www.cgcinc.com).

Gypsum Panel Products

SHEETROCK Brand continues to be the preferred and most widely used brand of gypsum panels in existence. These panels are available in more specialized forms than any other gypsum panel line. The high quality standards extend to other CGC components, designed to provide high-performance walls and ceilings. Thus, one dependable source of supply offers unit responsibility for the system used.

The SHEETROCK Brand Panel is a factory-produced panel composed of a noncombustible gypsum core encased in a strong, smooth-finish paper on the face side and a natural-finish paper on the back side. The face paper is folded around the long edges to reinforce and protect the core, and the ends are square-cut and finished smooth. Long edges of panels have a choice of edge designs (including tapered), allowing joints to be reinforced and concealed with a CGC joint treatment system.

Advantages

Interior walls and ceilings built with SHEETROCK Brand Panels have a durable surface suitable for most types of decorative treatment and for redecoration during the life of the building.

Dry Construction Factory-produced panels do not contribute moisture during construction. The joint finishing system contributes very little.

Fire Protection The gypsum core will not support combustion or transmit temperatures greatly in excess of 100°C (212°F) until completely calcined (the water is chemically driven off). Fire-resistance ratings of up to 4 hours for partitions, 3 hours for floor-ceilings and 4 hours for column and shaft fire resistant assemblies are available with specific assemblies. (See Chapter 10 for specific ratings and related assemblies.)

Sound Control SHEETROCK Brand Gypsum Panels are a vital component in sound-resistive partition and floor-ceiling systems. (See Chapter 10 and appendix for specific rating data.)

Low In-place Cost The easily cut gypsum panels install quickly. Fixture attachment and installation of electrical and mechanical services are simplified.

Dimensional Stability Expansion or contraction under normal temperature and humidity changes is small and normally will not result in warping or buckling. With joints properly reinforced, SHEETROCK Brand Panels are exceptionally resistant to cracking caused by internal or external forces. (See Appendix for thermal and hygrometric coefficients of expansion.)

Availability CGC (and USG) manufacturing plants produce gypsum board and related products described herein throughout North America. Special warehouse facilities, in addition to these plants, increase total distribution and service efficiency to major markets and rural areas from coast to coast. All standard gypsum board products are readily available upon short notice.

Gypsum Panel Limitations

1. Exposure to excessive or continuous moisture and extreme temperatures should be avoided. Not recommended for use in solar or other heating systems when board will be in direct contact with surfaces exceeding 52°C (125°F).
2. Must be adequately protected against wetting if used as a base for ceramic or other wall tile (see foil-back panel limitation, page 6). DUROCK Brand Cement Board is recommended for partitions in moisture-prone areas.
3. Maximum spacing of framing members: 12.7 mm (1/2″) and 15.9 mm (5/8″) gypsum panels are designed for use on framing centers up to 600 mm (24″); 9.5 mm (3/8″) panels are designed for use on framing centers up to 400 mm (16″). In both walls and ceilings, when 12.7 mm (1/2″) or 15.9 mm (5/8″) gypsum panels are applied across framing on 600 mm (24″) centers and joints are reinforced, blocking is not required. 6.4 mm (1/4″) SHEETROCK Brand Panels are not recommended for single-layer applications on open framing.
4. Application of SHEETROCK Brand Panels over 19 mm (3/4″) wood furring applied across framing is not recommended since the flexibility of the furring under impact of the hammer tends to loosen nails already driven. Furring should be nom. 38 x 38 mm (2″ x 2″) minimum (may be nom. 19 x 64 mm (1″ x 3″) if panels are to be screw-attached).

5. The application of gypsum panels over an insulating blanket that has first been installed continuously across the face of the framing members, is not recommended. Blankets should be recessed and flanges attached to sides of studs or joists.

6. To prevent objectionable sag in new gypsum panel ceilings, the weight of overlaid unsupported insulation should not exceed: 6.3 kg/m^2 (1.3 psf) for 12.7 mm (1/2″) thick panels with frame spacing 600 mm (24″) o.c.; 11.7 kg/m^2 (2.4 psf) for 12.7 mm (1/2″) panels on 400 mm (16″) o.c. framing (or 12.7 mm (1/2″) SHEETROCK Brand Interior Ceiling Board, Sag-Resistant on 600 mm (24″) o.c. framing); 10.7 kg/m^2 (2.2 psf) for 15.9 mm (5/8″) panels on 600 mm (24″) o.c. framing. 9.5 mm (3/8″) thick panels must not be overlaid with unsupported insulation. A vapour retarder should be installed in all exterior ceilings, and the plenum or attic space should be properly vented.

   During periods of cold or damp weather, where a polyethylene or equivalent vapour retarder is installed on ceilings behind the gypsum board, it is important to install the ceiling insulation before or immediately after installing the ceiling board. Failure to follow this procedure may result in condensation forming on the back side of the gypsum board, causing the board to sag.

   Water-based textures, interior finishing materials and high ambient humidity conditions can produce sag in gypsum ceiling panels, if adequate vapour and moisture control is not provided. The following precautions must be observed to minimize sagging of ceiling panels:

   a) Where vapour retarder is required in cold weather conditions, care must be taken to avoid condensation. The temperature of the gypsum ceiling panels and vapour retarder must remain above the interior air dew point temperature during and after the installation of panels and finishing materials.

   b) The interior space must be adequately ventilated and air circulation must be provided to remove water vapour from the structure.

   Most sag problems are caused by the condensation of water within the gypsum panel. The placement of vapour retarders, insulation levels and ventilation requirements will vary by location and climate and should be reviewed by a qualified engineer if in question.

7. To produce final intended results, certain recommendations regarding surface preparation, and painting products and systems must be adhered to for satisfactory performance.

8. Precaution should be taken against creating a double vapour retarder by using gypsum panels as a base for highly water vapour-resistant coverings when the wall already contains a vapour retarder. Moreover, do not create a vapour retarder by such wall coverings on the interior side of exterior walls of air-conditioned buildings in hot-humid climates where conditions dictate a vapour retarder location near the exterior side of the wall. Such conditions require assessment by a qualified mechanical engineer.

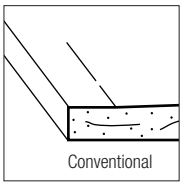
Products Available

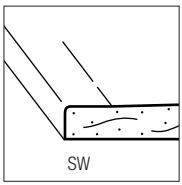
SHEETROCK Brand Gypsum Panels, Regular Have long edges tapered on the face side to form a shallow recess (nom. 1.3 mm (0.050″) deep) to accommodate joint reinforcement. Made in three thicknesses for specific purposes:

– 12.7 mm (1/2″), recommended for the finest single-layer construction in typical new construction and remodeling. The greater thickness provides increased resistance to fire exposure, transmission of sound, and sagging.

– 9.5 mm (3/8″), lightweight, applied principally in repair and remodel work over existing surfaces.

– 6.4 mm (1/4″), lightweight, low-cost, utility gypsum panel, used as a base layer for improving sound control in multilayer partitions and in covering old wall and ceiling surfaces. Also used for forming curved surfaces with short radii.





Types of Tapered Edges

SHEETROCK Brand 54″ Gypsum Panels Same as 12.7 mm (1/2″) regular core SHEETROCK Brand Gypsum Panels, but 152 mm (6″) wider. The added width reduces cutting, waste, joint finishing and labor costs for walls that are 2590 mm (8′6″) or 2743 mm (9′) tall.

SHEETROCK Brand Gypsum Panels, SW Have an exclusive tapered rounded edge design to help minimize ridging or beading and other joint imperfections. This edge produces a much stronger joint than regular tapered edge when pre-filled with DURABOND setting type compound and finished with joint treatment. Except for the rounded edge, panels are tapered like, and otherwise identical to, regular tapered-edge gypsum panels. Made in 15.9 mm (5/8″) and 12.7 mm (1/2″) thicknesses. Panels are available in regular or FIRECODE Core (Type X and Type C) formulations.

SHEETROCK Brand Gypsum Panels, FIRECODE Core 15.9 mm (5/8″) thick, combine all the advantages of regular panels with additional fire resistance—the result of a specially formulated core containing special additives that enhance the integrity of the core under fire exposure. Panels comply with ASTM requirements for Type X gypsum board.

SHEETROCK Brand Gypsum Panels, FIRECODE C Core Available in 12.7 mm (1/2″) and 15.9 mm (5/8″) thicknesses. Improved formulation exceeds ASTM requirements for Type X gypsum board. Based on tests at Underwriters Laboratories of Canada, Underwriters Laboratories Inc. and other nationally recognized testing agencies, certain partition, floor-ceiling, and column fire-protective assemblies using these special products provide 1-hr. to 4-hr. fire-resistance ratings.

In order to attain fire-resistance ratings, the construction of all such assemblies must be consistent with the assembly tested.

SHEETROCK Brand 6.4 mm (1/4″) Flexible Gypsum Panels Designed specifically for curved partitions, these panels are more flexible than standard SHEETROCK Brand Panels of the same thickness, making them ideal for use anywhere a tight radius is required for curved walls, arches and stairways. (See curved surface section, Chapter 3.)They make construction of curved surfaces easy and fast. Double-layer installation improves surface smoothness and fire protection. Meet ASTM C36 and C1396.

SHEETROCK Brand Gypsum Panels, ULTRACODE Core 19.1 mm (3/4″) thick, UL tested to provide a 2-hr. fire rating with single-layer construction and a 4-hr. fire rating with double-layer construction in certain specified systems (steel studs only). Because fewer layers are needed to meet fire ratings, ULTRACODE Core panel systems reduce labor material costs.

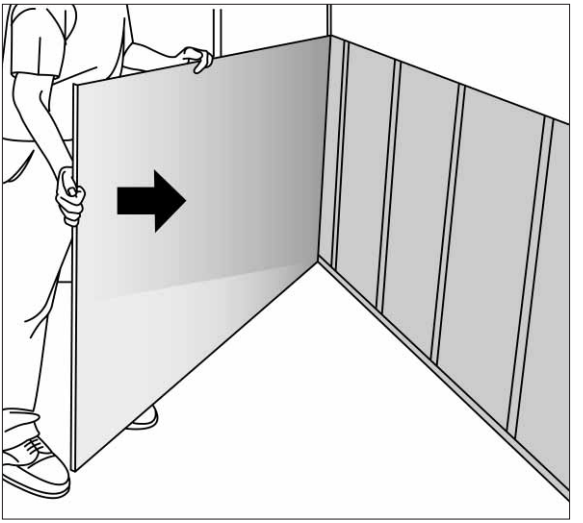
Gypsum Panels, Foil-Back

SHEETROCK Brand Gypsum Panels, Foil-Back, are made by laminating special kraft-backed aluminum foil to the back surface of regular, SW, FIRECODE or FIRECODE C Panels. Forms an effective vapour retarder where required in cold climates; for walls and ceilings when applied with foil surface next to framing on interior side of exterior wall in single-layer application; or as the base layer in multi-layer systems. Foil-Back Gypsum Panels provide a water vapour retarder to help prevent interior moisture from entering wall and ceiling spaces. In tests per ASTM E96 (desiccant method), 12.7 mm (1/2″) foil-back panels showed a vapour permeability of 3.5 ng/(Pa•s•m^2) (0.06 perms). The permeance of the total exterior wall is dependent on the closure of leaks with sealants at periphery and penetrations such as outlet boxes.

These panels are designed for use with furred masonry, or wood or steel framing. Thickness: 15.9 mm (5/8″), 12.7 mm (1/2″) and 9.5 mm (3/8″). Sizes, edges and finish: same as for base panels.

Foil-Back Panel Limitations

1. Not recommended as a base for ceramic or other tile or as base layer for SHEETROCK Brand TEXTONE Vinyl-Faced Gypsum Panels in double-layer assemblies.
2. Not to be used in air conditioned buildings in climates having sustained high outside temperature and humidity, such as the Southern Atlantic and Gulf Coast areas. Under these conditions, a qualified mechanical engineer should determine vapour retarder location.



Foil-Back Panels applied to steel framing over the interior of exterior walls provide effective vapour retarder.

Gypsum Panels, Water Resistant

A proven water-resistant base for the adhesive application of ceramic and plastic tile and plastic-faced wall panels. Made water-resistant all the way through. The multilayered face and back paper are chemically treated to combat penetration of moisture. The gypsum core is made water-resistant with a special moisture-resistant composition. The panels are easily recognized because of their distinctive green faces.

These panels are designed for bathrooms, powder rooms, kitchens and utility rooms. In addition, they may be used in modernization work when the existing surfaces are removed and Water Resistant Panels are applied directly to framing. SHEETROCK Brand Gypsum Panels, Water-Resistant, FIRECODE and FIRECODE C Core Panels also are used in fire-rated assemblies that may be exposed to moisture during construction. Panels comply with ASTM C630 and C1396.

Available in five product types:

SHEETROCK Brand Gypsum Panels, Water-Resistant, Regular 12.7 mm (1/2″) thickness for single-layer application in residential construction; 15.9 mm (5/8″) thickness is also available on special request.

SHEETROCK Brand Gypsum Panels, Water-Resistant, FIRECODE and FIRECODE C Core in 12.7 mm (1/2″) and 15.9 mm (5/8″) thickness with special core to provide fire resistance for required ratings.

SHEETROCK Brand HUMITEK Interior Panels. A fire resistant gypsum board 12.7 mm (1/2″) thick with a water and mould-resistant gypsum core encased in specially treated water repellent paper on both sides and along the edges. Its mould resistant core provides the best protection against mould available in faced gypsum based products.

SHEETROCK Brand HUMITEK FIRECODE Core (Type X) Interior Panels 15.9 mm (5/8″) thickness with Type X core to provide fire resistance for required ratings.

Because **HUMITEK** Panels are new please see current literature for the latest information about uses and applications.

FIBEROCK Brand AQUA-TOUGH Interior Panels Finishing flexibility and superior water resistance in a single panel. Manufactured using CGC's unique gypsum-fiber technology, these durable panels provide water resistance superior to conventional drywall, but can be installed and finished using basic drywall techniques. Uniform composition, without face paper, is based on a uniquely engineered gypsum/cellulose-fiber combination that won't weaken if the surface is penetrated by moisture. Panels comply with ASTM C1278, and meet or exceed the requirements of C79 and C630.

Because FIBEROCK AQUA-TOUGH Interior is a new product, see the current literature for the latest information about uses and application.

Water-Resistant Panel Limitations

1. Adherence to recommendations concerning sealing exposed edges, painting, tile adhesives, framing and installation is necessary for satisfactory performance.
2. Not recommended for ceilings with framing spacing greater than 300 mm (12″) o.c. for 12.7 mm (1/2″) board or 400 mm (16″) o.c. for 15.9 mm (5/8″) board, or for single-layer resilient attachment where tile is to be applied or in remodeling unless applied directly to studs.

3. Panels that would normally receive an impervious finish, such as ceramic tile, should not be installed over a vapour retarder nor on a wall acting as a vapour retarder.
4. Store in an enclosed shelter and protect from exposure to the elements.
5. Panels are not intended for use in areas subject to constant moisture, such as interior swimming pools, gang showers and commercial food processing areas—DUROCK Brand Cement Board is recommended for these uses. (See DUROCK applications, Chapter 4.)

Exterior Gypsum Ceiling Board

SHEETROCK Brand Exterior Gypsum Ceiling Board, Sag-resistant, Weather-resistant board designed for use on the soffit side of eaves, canopies and carports and other commercial and residential exterior applications with indirect exposure to the weather. Noncombustible core is simply scored and snapped for quick application. Panels can be painted and provide good sag resistance.

Installed conventionally in wood and metal-framed soffits; batten strips or mouldings can be used over butt joints or joints can be treated; backing strips are required for small vent openings. Natural finish. Available in 12.7 mm (1/2″) thickness with regular core and in 15.9 mm (5/8″) thickness with fire-rated core—both with eased edges. Board complies with ASTM C931 and C1396.

Sag-Resistant Ceiling Panels

SHEETROCK Brand Interior Ceiling Board, Sag-Resistant Significantly lighter in weight than 15.9 mm (5/8″) gypsum panels (also lighter than standard 12.7 mm (1/2″) panels) and provide greater sag resistance. These panels also support sprayed textures and overlaid insulation better than 15.9 mm (5/8″) gypsum panels. Panels are 12.7 mm (1/2″) thick and are available in 2440 mm (8′) or 3660 mm (12′) lengths, 1220 mm (4′) wide. Meet ASTM C1395 and C1396.

Abuse-Resistant Panel Products

SHEETROCK Brand Abuse-Resistant Panels Offer greater indentation and through-penetration resistance than standard gypsum panels. Available in 12.7 mm (1/2″) FIRECODE C core or 15.9 mm (5/8″) FIRECODE Core. Abuse-resistant panels are made with strong face paper and a heavy-duty backing sheet, which improves the integrity of the board. As a result, the panels are able to withstand impact better than standard gypsum board and are less likely to allow penetrations or show indentations. Meets ASTM C36 and C1396.

FIBEROCK Brand Panels Deliver greater impact and puncture resistance that any other gypsum panel. Made with a unique gypsum/cellulose fiber core, the panels impede penetrations by sharp objects, including sharp blows from small objects, and exhibit more rigidity than standard gypsum panels. They also provide greater flexural strength and screw withdrawal properties than other gypsum panels. The 15.9 mm (5/8″) panels comply with ASTM C1278 for Type X gypsum board. See the current literature for the latest application information.

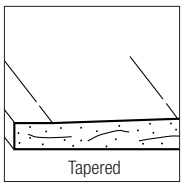
FIBEROCK Brand VHI Panels Are glass fiber mesh reinforced to provide extraordinary penetration resistance and rigidity for a single-layer gypsum panel. Available in 12.7 mm (1/2″) and 15.9 mm (5/8″) thicknesses. See the current literature for the latest application information.

Specifications—Gypsum Panel Products

	Thickness		Length	Approx. wt.	
	mm	in.	mm[1]	kg/m²	lb./ft.²
SHEETROCK Brand Regular Panels[2]	6.4	1/4	2440 and 3050	5.9	1.2
	9.5	3/8	2440, 2745, 3050, 3660, 4270	6.8	1.4
	12.7	1/2	2440, 2745, 3050, 3660, 4270	8.3	1.7
FIRECODE Core Panels[2]	15.9	5/8	2440, 2745, 3050, 3660, 4270	10.7	2.2
FIRECODE C Core Panels[2]	12.7	1/2	2440, 2745, 3050, 3660, 4270	9.3	1.9
	15.9	5/8	2440, 2745, 3050, 3660, 4270	12.2	2.5
ULTRACODE Core Panels	19.1	3/4	2440, 2745, 3050, 3660	13.7	2.8
Water-Resistant Panels	12.7	1/2	2440, 3050, 3660	8.8	1.8
	15.9	5/8	2440, 3050, 3660	10.7	2.2
HUMITEK Interior Panels	12.7	1/2	2440, 3050, 3660	9.6	1.9
HUMITEK FIRECODE Interior Panels	15.9	5/8	2440, 3050, 3660	11.7	2.4
Water-Resistant FIRECODE and FIRECODE C Core Panels	15.9	5/8	2440, 3050, 3660	12.2	2.5
Water-Resistant FIRECODE C Core Panels	12.7	1/2	3050	9.3	1.9
FIBEROCK Brand AQUA-TOUGH Interior Panels	12.7	1/2	1525, 2440, 2745, 3050	10.7	2.2
	15.9	5/8	1525, 2440, 2745, 3050	13.2	2.7
Exterior Ceiling Board Regular Board	12.7	1/2	2440, 3660	9.3	1.9
	15.9	5/8	2440, 3660	11.7	2.4
FIRECODE Board	15.9	5/8	2440, 3660	11.7	2.4
Interior Ceiling Board Sag Resistant	12.7	1/2	2440, 3660, 4270	7.8	1.6
1/4″ Flexible Panels	6.4	1/4	2440 and 3050	5.9	1.2
54″ Panels	12.7	1/2	2440, 2745, 3050, 3660, 4270	8.3	1.7
Abuse Resistant Panels	12.7	1/2	2440, 2745, 3050, 3660	10.7	2.2
	15.9	5/8	2440, 2745, 3050, 3660, 4270	13.2	2.7
FIBEROCK Brand Panels	12.7	1/2	2440, 2745, 3050	10.7	2.2
	15.9	5/8	2440, 2745, 3050	13.2	2.7
FIBEROCK Brand VHI Panels	15.9	5/8	2440, 2745, 3050	13.2	2.7

(1) Imperial lengths: 2440 mm = 8 ft.; 2745 mm = 9 ft.; 3050 mm = 10 ft.; 3660 mm = 12ft.; 4270 mm = 14ft.
(2) Also available in Foil-Back Panels. NOTE: See page 13 for information on gypsum bases.

Veneer Plaster Gypsum Base Products



Type of Edge

Gypsum Bases finished with veneer plasters are recommended for interior walls and ceilings in all types of construction. For these interiors, a veneer of specially formulated gypsum plaster is applied in one coat (1.6 - 2.4 mm (1/16″ to 3/32″) thick) or two coats (approximately 3 mm (1/8″) thick) over the base. The resulting smooth or textured monolithic surfaces are preferred for hard-wear locations where durability and resistance to abrasion are required.

GRAND PRIX Brand Veneer Plaster Bases are large-size gypsum board panels (1220 mm (4-ft.) width) that are rigid and fire-resistant. A gypsum core is faced with specially treated, multilayered paper (blue) designed to provide a maximum bond to veneer plaster finishes. The paper's absorbent outer layers quickly and uniformly draw moisture from the veneer plaster finish for proper application and finishing; the moisture-resistant inner layers keep the core dry and rigid to resist sagging. The face paper is folded around the long edges. Ends are square-cut and finished smooth.

Gypsum Base Advantages

Gypsum bases, in conjunction with selected veneer plaster finishes provide the lasting beauty of plaster walls and ceilings at a lower cost and with less weight and residual moisture than conventional plaster.

Rapid Installation Construction schedules are shortened. Walls and ceilings can be completed in 3 to 4 days, from bare framing through decorated interiors.

Fire Resistance Ratings of up to 4 hours for partitions, 3 hours for floor-ceilings and 4 hours for column fire protection assemblies have been obtained.

Sound Control Gypsum base partitions faced with veneer plaster finishes on both sides have high resistance to sound transmission. Resilient attachment of base and use of THERMAFIBER SAFB Insulation further improve sound isolation.

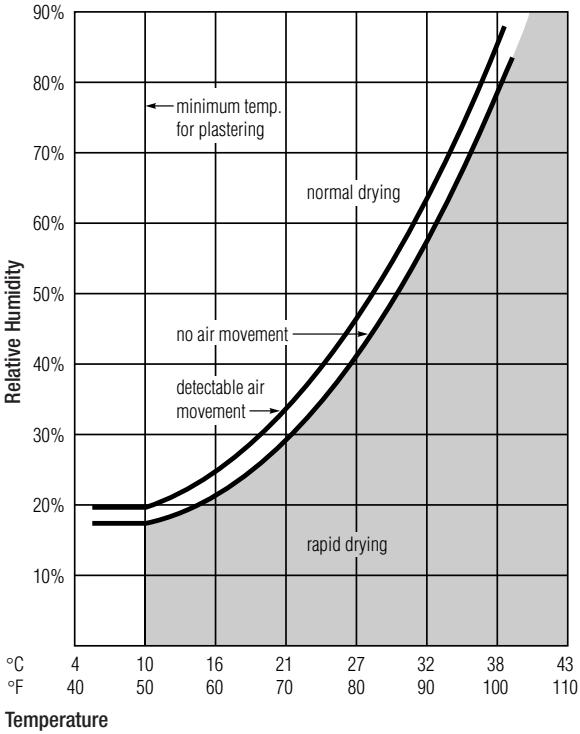
Durability Hard, high-strength surfaces provide excellent abrasion resistance, resulting in minimum maintenance, even in high-traffic areas.

Easily Decorated Smooth-surfaced interiors readily accept paints, texture, fabric and wallpaper. Veneer plaster finishes also may be textured. If completely dry, finishes can be painted with breather-type paints the day following application.

Gypsum Base Limitations

1. Maximum frame and fastener spacing is dependent on thickness and type of base used.
2. Recommended for use with IMPERIAL Brand Basecoat Plaster, IMPERIAL Brand Finish Plaster, DIAMOND Brand Veneer Basecoat Plaster and DIAMOND Brand Interior Finish Plaster. Do not apply gauged lime-putty finishes or portland cement plaster directly to base; bond failure is likely.
3. Not recommended for use in areas exposed to excessive moisture for extended periods or as a base for adhesive application of ceramic tile in wet areas (DUROCK Brand Interior Cement Board is recommended for this use).
4. Gypsum base that has faded from the original light blue color, due to exposure to sunlight, should be treated with either CGC Plaster Bonder or a solution of CGC Accelerator—Alum Catalyst before DIAMOND Brand Interior Finish Plaster or any veneer plaster finish containing lime is applied. IMPERIAL Brand Basecoat and Finish Plaster, or DIAMOND Brand Basecoat Plasters, do not contain lime and are not susceptible to bond failure over faded base.
5. Joints and internal angles must be treated with CGC Brand Joint Tape and DURABOND Setting-Type Joint Compound or SHEETROCK Lightweight Setting-Type Joint Compound when building temperature-humidity conditions fall in the “rapid-drying” area of the graph, or when metal framing is specified, or when 600 mm (24″) o.c. wood-frame spacing and a single layer gypsum base veneer system is specified (15.9 mm (5/8″) base with one-coat veneer finish and 12.7 mm (1/2″) or 15.9 mm (5/8″) base with two-coat veneer finish). Single layer 12.7 mm (1/2″) base is not recommended with 600 mm (24″) o.c. spacing and one-coat veneer plaster.

Plaster Drying Conditions



Products Available

Grand Prix Brand Veneer Plaster Base A special gypsum board that has been specifically engineered for use with Imperial Brand Finish Plaster and Diamond Brand Interior Finish Plaster, or Imperial Brand and Diamond Brand Basecoat Plasters. It provides the strength and absorption characteristics necessary for top-quality veneer plaster finishing performance. Large sheets minimize the number of joints and speed installation. The high-density, fire-resistant gypsum core has a superior controlled-absorption paper lightly tinted blue on the face side and a strong liner paper on the back side. Available in two thicknesses with tapered edges: 12.7 mm (1/2″) for single-layer application in new light construction; 15.9 mm (5/8″) recommended for the finest high-strength veneer plaster finish construction. The greater thickness provides increased resistance to fire exposure and sound transmission and allows 600 mm (24″) o.c. spacing of wood framing. Grand Prix Brand Veneer Plaster Base may be used with Diamond Brand Interior Finish Plaster to embed cables for radiant heat ceilings. Meets ASTM C588 and C1396.

Grand Prix Brand Veneer Plaster Base, Firecode and Firecode C Core Grand Prix Brand Veneer Plaster Base, Firecode Core, in 15.9 mm (5/8″) thickness, and Firecode C Core in 12.7 mm (1/2″) and 15.9 mm (5/8″) thicknesses, combine all the advantages of Regular Grand Prix Brand Veneer Plaster Base with additional resistance to fire exposure—the result of specially formulated mineral cores. ULC listed and UL Classified for fire resistance. Meets ASTM C588 and C1396.

GRAND PRIX Brand Veneer Plaster Base, ULTRACODE Core GRAND PRIX Brand Veneer Plaster Base, ULTRACODE Core in 19.1 mm (3/4″) thickness, has a fire-resistant core that permits fire ratings to be achieved with fewer layers of panels. Meets ASTM C588 and C1396.

GRAND PRIX Brand Abuse-Resistant (AR) Veneer Plaster Base offers greater indentation and through-penetration resistance than standard gypsum panels. Available in 12.7 mm (1/2″) FIRECODE C core or 15.9 mm (5/8″) FIRECODE Core.

Abuse-resistant panels are made with strong face paper and a heavy-duty backing sheet, which improves the integrity of the board. As a result, the panel is able to withstand impact better than standard Veneer Plaster Base and is less likely to allow penetrations. Meets ASTM C588 and C1396.

Foil-Back GRAND PRIX Brand Veneer Plaster Base Bright aluminum foil laminated to the back side acts as a vapour retarder. Available in Regular, FIRECODE and FIRECODE C Bases. Not available in all geographical areas.

Foil-Back Base Limitation: Do not use as a base for ceramic or other tile or as a face layer in multilayer systems.

Other Veneer Plaster Base Products

DUROCK Brand Cement Board A glass fiber-mesh reinforced aggregated portland cement panel that provides a high-strength substrate for improved abuse-resistance. Requires the use of CGC Plaster Bonder. Available 12.7 mm (1/2″) thick (15.9 mm (5/8″) available under minimum order conditions) in 1220 x 2440 mm (4′ x 8′) and 1220 x 3050 mm (4′ x 10′) dimensions.

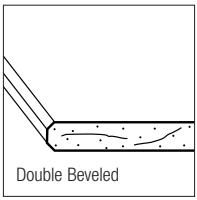
FIBEROCK Brand Abuse Resistant Panels and FIBEROCK Brand VHI Panels Provide improved indentation and penetration resistance. These panels deliver greater impact and puncture resistance than any other gypsum panel. Made with a unique gypsum/ cellulose fiber core, the panels impede penetrations by sharp objects, including sharp blows from small objects, and exhibit more rigidity than standard gypsum panels. They also provide greater flexural strength and screw withdrawal properties than other gypsum panels. The 15.9 mm (5/8″) panels comply with ASTM C1278 for Type X gypsum board. Requires the use of CGC Plaster Bonder. VHI Panels are glass fiber mesh reinforced to provide extraordinary penetration resistance and rigidity for a single-layer gypsum panel; available in 12.7 mm (1/2″) and 15.9 mm (5/8″) thicknesses. See the current literature for the latest application information.

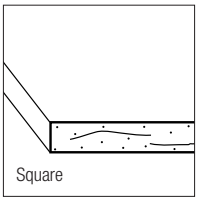
Specifications—Gypsum Bases

Product	Thickness mm	Thickness in.	Length mm(1)	Approx. wt. kg/m²	Approx. wt. lb./ft.²
GRAND PRIX Brand Veneer Plaster Base(2)					
Regular	12.7	1/2	2440, 2745, 3050, 3660, 4270	8.8	1.8
FIRECODE	15.9	5/8	2440, 2745, 3050, 3660, 4270	11.2	2.3
FIRECODE C	12.7	1/2	2440, 2745, 3050, 3660, 4270	9.8	2.0
FIRECODE C	15.9	5/8	2440, 2745, 3050, 3660, 4270	12.2	2.5
ULTRACODE	19.1	3/4	2440, 2745, 3050, 3660, 4270	14.6	3.0
Abuse-Resistant FIRECODE C	12.7	1/2	2440, 2745, 3050, 3660, 4270	9.8	2.0
Abuse-Resistant FIRECODE	15.9	5/8	2440, 2745, 3050, 3660, 4270	12.2	2.5
DUROCK Brand Cement Board	12.7	1/2	1525, 2440	14.6	3.0
FIBEROCK Brand AR Panels	12.7	1/2	2440, 2745, 3050	10.9	2.2
	15.9	5/8	2440, 2745, 3050	13.4	2.7
FIBEROCK Brand VHI Panels	15.9	5/8	2440, 2745, 3050	13.4	2.7

(1) Imperial lengths: 2440 mm = 8 ft.; 2745 mm = 9 ft.; 3050 mm = 10 ft.; 3660 mm = 12ft.; 4270 mm = 14ft.
(2) Also available in Foil-Back Base.

Gypsum Liner and Sheathing Products





Types of Edges

SHEETROCK Brand Gypsum Liner Panels A 25.4 mm (1″) thick, special fire-resistant gypsum core encased in multilayered, moisture-resistant green paper. Panels are used in CGC Cavity Shaft Walls, CGC Area Separation Walls, select floor assemblies and infill panel systems for exterior curtain walls. Panels have beveled edges for easy insertion between the supporting flanges of steel C-H studs, E-studs or H-studs. Meets ASTM C442 and C1396.

SHEETROCK Brand HUMITEK Gypsum Liner Panels A 25 mm (1″) thick fire resistant gypsum core enhanced with water, mould and mildew resistant properties encased in multilayered, moisture resistant blue paper. Panels are used similarly to regular Liner panels but where added moisture, mould and mildew resistance is required. Because SHEETROCK Brand Gypsum Liner Panels are new please consult current literature for latest information about uses and applications.

SHEETROCK Brand HUMITEK Exterior Panels A fire-resistant gypsum board, 12.7 mm (1/2″) thick, with a water and mould resistant gypsum core encased in specially treated water-repellent paper on both sides and long edges. Its weather resistance, mould and mildew resistance, water repellency, fire resistance and low applied cost make it suitable for use in exterior wall construction of garden apartments and light commercial buildings as well as in homes. Also used in steel stud curtain wall construction. Its mould resistant gypsum core provides the best protection against mould available in faced gypsum based products.

SHEETROCK Brand HUMITEK Exterior Panels are suitable for a wide range of exterior finishes such as, but not limited to, masonry veneer, wood, vinyl and aluminum siding, wood shingles and stucco—exterior finish attachment is limited to mechanical fastening through sheathing into the framing.

Because HUMITEK Panels are new please see current literature for the latest information about uses and application.

FIBEROCK Brand Sheathing with AQUA-TOUGH New sheathing product manufactured using CGC's unique gypsum-fiber technology. FIBEROCK Brand Sheathing panels outperform paper- or glass-mat-faced gypsum sheathing. They are strong, water-durable and provide a unique water-drainage capability. FIBEROCK Brand Sheathing has a unique engineered drainage design on its back surface to aid in removing water that has entered the system. Since the panels have no face paper or mesh, they serve as an effective substrate for expanded polystyrene (EPS) insulation board that is adhesively attached to them.

Meets ASTM C1278, and meets or exceeds the properties of C79 and C1177. Available 12.7 mm (1/2″) and 15.9 mm (5/8″) thick, in 815 mm (32″) and 1220 mm (48″) widths and in 2440 mm (8′) length. They have square edges and weigh approximately 10.7 kg/m^2 (2.2 psf) for 12.7 mm (1/2″) thickness, 14.6 kg/m^2 (3.0 psf) for 15.9 mm (5/8″). See the current literature for the latest application information. Because FIBEROCK is a new product please refer to current literature for the latest information on installation and uses.

GYP-LAP Gypsum Sheathing Treated Core A low-cost, weather and fire-resistant board designed to combine excellent performance and economy. Noncombustible gypsum core adds fire safety not available with plywood or wood fiber sheathing. Clad in water-repellent paper on face and back surfaces, with a water resistant core. Lightweight and easily handled by one worker. Panels are 1220 mm (4′) wide, 2440 mm (8′) long with square edges. Thickness is 12.7 mm (1/2″); Type X core available in 15.9 mm (5/8″) thickness. Meets ASTM C79 and C1396.

GYPLAP Sheathing Limitations

1. Sheathing may be stored outside for up to one month, but must be stored off the ground and must have a protective covering.
2. Maximum stud spacing is 600 mm (24″) o.c.
3. When applied to a structure, sheathing must not be left exposed to the elements for more than one month unless the procedure as outlined in limitation 5 (below) is followed.
4. Exterior finish systems applied over gypsum paper-faced sheathing must be applied with mechanical fasteners through the sheathing into the wall framing. Alternate methods of application are not endorsed and their performance and that of the substrate are solely the responsibility of the specifier. Direct application of paint, texture finishes and coatings over gypsum sheathing is not recommended.

5. For in-place exposure up to six months, all gaps resulting from cuts, corners, joints and machine end cuts of the sheathing should be filled with exterior caulk at time of erection, or covered with a suitable water barrier.
6. For curtain wall construction, cover the sheathing with No. 15 asphalt felt or other suitable water barrier within 30 days of sheathing installation. Felt should be applied horizontally with 50 mm (2″) overlap and immediately anchored with metal lath, masonry ties or corrosion-resistant screws or staples.
7. Sheathing is not recommended for exterior ceilings and soffits, unless covered with metal lath and exterior portland cement stucco.
8. System should be designed to allow free movement of water out of the system where the sheathing is installed to allow it to dry.

Specifications—Liner and Sheathing Products

	Thickness		Width			Length	Approx.wt.	
Product	**mm**	**in.**	**mm**	**in.**	**Edges**	**mm(1)**	**kg/m²**	**lb./ft.²**
SHEETROCK Brand Liner Panels	25.4	1	600	24	Bevel	up to 4877	20.0	4.1
SHEETROCK Brand HUMITEK Liner Panels	25.4	1	600	24	Bevel	up to 4877	20.0	4.1
GYPLAP Brand Sheathing Treated Core	12.7	1/2	1220	48	Square	2440, 2745	9.8	2.0
	15.9	5/8	1220	48	Square	2440, 2745	11.7	2.4
HUMITEK Exterior Panels	12.7	1/2	1220	48	Square	2440, 2745	9.6	1.9
HUMITEK FIRECODE Exterior Panels	15.9	5/8	1220	48	Square	2440, 2745	11.7	2.4
SHEETROCK Brand FIRECODE Sheathing	15.9	5/8	1220	48	Square	2440, 2745	11.7	2.4
FIBEROCK Brand Sheathing AQUA-TOUGH	12.7	1/2	1220	48	Square	2440	10.7	2.2
	15.9	5/8	1220	48	Square	2440	13.2	3.0

(1) Imperial lengths: 2440 mm = 8 ft.; 2745 mm = 9 ft.; 3050 mm = 10 ft.; 3660 mm = 12ft.; 4270 mm = 14ft.; 4877 mm = 16ft.

Predecorated Panel Products

SHEETROCK Brand TEXTONE Vinyl-Faced Gypsum Panels Conventional gypsum board with factory-applied vinyl facings in a wide range of coordinated decorator colors. The facings provide a broad choice of color, texture and pattern for mix-and-match versatility. The tough vinyl covering is durable and easily cleaned. Panels have beveled long edges which form a shallow V-groove joint.

SHEETROCK Brand TEXTONE Vinyl-Faced Panels, together with Mouldings factory-wrapped in Vinyl, fasteners, adhesives and other conventional drywall components, are used for predecorated permanent partitions, demountable partitions and in remodeling work. Not recommended for ceilings because end joints are difficult to conceal.

The rugged, scuff-resistant vinyl is embossed for texture and woodgrain effects.

TEXTONE Vinyl-Faced Panel Limitations

1. For adhesive application of SHEETROCK Brand TEXTONE Vinyl-Faced Panels, only water-thinned adhesives are recommended. Other adhesives may not be compatible and could result in delamination and discoloration of vinyl surface.
2. If SHEETROCK Brand TEXTONE Vinyl-Faced Panels, FIRECODE Core, are used in a fire-rated assembly, instead of a non-vinyl-faced product such as SHEETROCK Brand Gypsum Panels, FIRECODE Core, the applicable fire test must permit exposed joints or battens.
3. Not recommended for use over foil-back panels or other vapour retarder in exterior walls.
4. Avoid exposure to excessive or continuous moisture and extreme temperatures.
5. Do not apply SHEETROCK Brand TEXTONE Vinyl-Faced Gypsum Panels or field laminate nonpermeable vinyls over gypsum panels on exterior walls in hot, humid climates without suitable vapour control or dry air circulation behind the panels.

Technical Data:

SHEETROCK Brand TEXTONE Vinyl-Faced Panels—meet ASTM C960; gypsum panels comply with ASTM C36 and C1396. Light-reflectance values available on request. (See Surface Burning Characteristics below.)

Panels are manufactured 12.7 mm (1/2″) thick, 1220 mm (4′) wide, and 2745 mm (9′) long. They may also be specially ordered in 9.5 mm (3/8″) and 15.9 mm (5/8″) thicknesses, and custom lengths from 1830 mm (6′) to 4270 mm (14′). SHEETROCK Brand TEXTONE Vinyl-Faced Panels, FIRECODE Core, with special core for fire-rated construction, are available in 12.7 mm (1/2″) and 15.9 mm (5/8″) thicknesses, 1220 mm (4′) wide. (See current Technical Folder SA-928 for pattern and color selections. Contact sales representative for custom colors and patterns also available.)

Vinyl covering of SHEETROCK Brand TEXTONE Vinyl-Faced Panels is directly attached to gypsum panel without sheeting.

Specifications—SHEETROCK Brand TEXTONE Vinyl-Faced Panel Vinyl

Panel surface burning characteristics[1] and vapour permeance[2]			
SHEETROCK Brand TEXTONE Vinyl-Faced Pattern	**Film thickness or weight**	**Flame spread**	**Smoke dev.**
Pumice	6 mils	≤ 25	≤ 50
Moonstone	8 mils	≤ 25	≤ 50
Granite	6 mils	≤ 25	≤ 50
Tweed	5.3 oz./yd.^{2}	≤ 25	≤ 50
Trafalgar	5.3 oz./yd.^{2}	≤ 25	≤ 50
Academy	5.3 oz./yd.^{2}	≤ 25	≤ 50
Burlap	5.3 oz./yd.^{2}	≤ 25	≤ 50
Striae	5.3 oz./yd.^{2}	≤ 25	≤ 50
Sonoma	5.3 oz./yd.^{2}	≤ 25	≤ 50
Brushwork	5.3 oz./yd.^{2}	≤ 25	≤ 50
Pebble-Glip	2 mils	≤ 25	≤ 50

(1) Tested in accordance with ASTM E84. (2) Tested in accordance with ASTM E96-90. (3) Comply with Federal Specification CCC-2-408C, Type 1.

Floor Underlayment Products

FIBEROCK Brand AQUA-TOUGH Underlayment A fiber-reinforced panel for floor underlayment in residential construction. These panels resist indentation. They are free of resins, adhesives, solvents and dyes and are approved by major resilient-flooring and adhesive manufacturers. They have a surface coating that enhances bonding and workability. Available 6.4 mm (1/4″) to 9.5 mm (3/8″) thick. FIBEROCK Underlayment AQUA-TOUGH is suitable for ceramic tile, resilient, hardwood and carpet in all areas of residential construction. See current literature for the latest application information.

DUROCK Brand Underlayment A glass fiber-mesh reinforced aggregated portland cement panel for floors and countertops. Its nominal 8 mm (5/16″) thickness helps eliminate transition trim when abutting carpet or wood flooring, and it helps minimize level variations with other finish materials. Its 1220 x 1220 mm (4′ x 4′) size is easy to handle and helps cut down on waste. It may be applied directly over old substrate on countertops to save time. Regular 12.7 mm (1/2″) DUROCK Brand Cement Board may also be used for underlayment applications.

Suspended Ceiling Products

Suspended ceilings offer the advantages of variable ceiling height and expanded plenum usage that are not always available with conventional ceiling construction. CGC offers several products for suspended ceiling construction that provide superior performance in the areas of fire resistance and sound attenuation. See Chapter 9 for information on acoustical ceilings.

SHEETROCK Brand TEXTONE Gypsum Lay-In Panel

SHEETROCK Brand TEXTONE Gypsum Lay-In Panels, with *CLIMAPLUS* performance, are designed for use in standard ceiling suspension systems for exceptional economy, ease of installation and accessibility to the plenum. FIRECODE C Core Panels also qualify for UL design fire-rated assemblies to 1-1/2 hours (UL design G222) and 2 hours (UL design G259) when used with fire-rated steel suspension systems such as DONN DXL, DXLA or ZXLA grid systems. SHEETROCK Brand Gypsum Lay-In Panels, with *CLIMAPLUS* performance, are made of 12.7 mm (1/2″) regular Core and FIRECODE C Core gypsum board in both 610 x 610 mm (2′x2′) or 610 x 1220 mm (2′x4′) sizes. Both sizes are available with either laminated white vinyl facing or natural paper facing.

All *ClimaPlus* performance products carry a warranty to withstand conditions up to 40°C (104°F) and 90% relative humidity without visible sag. The panels are guaranteed for 10 years against visible sag, or 15 years when used with DONN Brand Suspension Systems.

Vinyl facing is embossed in a stipple pattern for a soft, lightly textured look. It is 2 mils thick for toughness and durability, and can withstand repeated washings with no sign of abrasion. Natural paper facing can be left plain for utilitarian applications or can be painted to match room color scheme.

SHEETROCK Brand TEXTONE Gypsum Lay-In Ceiling Panels, with *CLIMAPLUS* performance, are safe, sanitary and washable. They meet USDA requirements for kitchens, restaurants and other food service areas and are suitable for hospitals, laboratories, nursing homes and other health care facilities. Attain interior finish classification Type III, Form A, Class 3; Class A (NFPA 101). Panels with white vinyl facing achieve light reflectance LR1. Panels also can be used in applications such as covered entryways and parking garages.

SHEETROCK Brand CLEAN ROOM *CLIMAPLUS* Vinyl Panels

SHEETROCK Brand TEXTONE CLEAN ROOM *ClimaPlus* Class 100 Panels have embossed vinyl laminated facing and meet Federal Standard 209E; “Clean Room and Work Station Requirements Controlled Environment.”

Advantages

Conventional Installation Tiles install quickly and easily in standard exposed grid.

Easy Maintenance Embossed vinyl facing is washable to keep surface bright and light-reflecting.

Outdoor Applications Excellent in protected areas when used with compatible suspension system, such as DONN Environmental ZXA grid, which features 25-gauge, hot-dipped galvanized steel with corrosion-resistant aluminum face. 1220 mm (4′) hanger spacing achieves intermediate-duty rating vs. 915 mm (3′) spacing for aluminum grids.

Sound Attenuation Tiles provide CAC range of 40.

Performance Tiles qualify for fire-rated assemblies. Surface burning characteristics: Flame Spread 20, Smoke Developed 5. Class A rated on all products (ASTM E84 test procedure). Thermal performance up to R-0.45. Weight 9.77 kg/m^2 (2.00 lb./ft.^{2})

Specifications—SHEETROCK Brand Gypsum Lay-In Panel

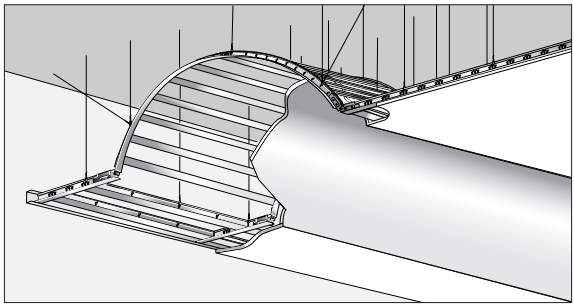
			Regular			FIRECODE C		
	Size	Edge	Item No.	NRC Range	CAC Min.	Item No.	NRC Range	CAC Min.
SHEETROCK Brand Gypsum Lay-In Panel	610x610x12.7 mm (2′x2′x1/2″)	Square	—	N/A	40	3260	N/A	5
	610x1220x12.7 mm (2′x4′x1/2″)	Square	—	N/A	40	3270	N/A	5
Unfinished Paper Facing SHEETROCK Brand Lay-In Gypsum Panel	610x1220x12.7 mm (2′x4′x1/2″)	Square	—	N/A	40	3450	N/A	5
SHEETROCK Brand CLEAN ROOM *CLIMAPLUS* Gypsum Lay-In Panel	610x1220x12.7 mm (2′x4′x1/2″)	Square	N/A	N/A	40	3200	N/A	5

CGC Drywall Suspension System

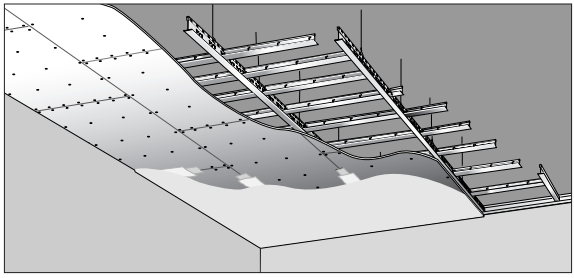
The CGC Drywall Suspension System provides a fast and economical method of installing a gypsum panels ceiling while supplying support for lighting and air handling accessories. The system is designed for direct screw attachment of gypsum panels to produce either flat or curved surfaces. Single panels may be up to 15.9 mm (5/8″) thick. Double-layer panel applications may be up to 32 mm (1-1/4″) combined thickness.

The CGC Drywall Suspension System is made of hot-dipped galvanized steel. Main tees are 38 mm (1-1/2″) high x 3660 mm (144″) long with a rectangular top bulb and 24 mm (15/16″) or 38 mm (1-1/2″) wide flange. The system offers the option of using 37 mm (1-7/16″) wide-faced furring

Vault Drywall Ceilings



Flat Drywall Ceilings



cross channels or 38 mm (1-1/2″) wide furring cross tees for gypsum panel attachment. Face of both cross channels and cross tees is knurled to improve fastening of drywall screws. Also available are tees with 24 mm (15/16″) exposed flange to be used with lay-in light fixtures.

Direct-hung CGC Drywall Suspension System is used in UL designs with fire ratings of 1, 1-1/2, 2 and 3 hours. 1-hour UL designs: L-502, L-508, L-513, L-515, L-525, L-526, L-529, P-501, P-507, P-508, P-509, P-510, P-516. 1-1/2-hour UL designs: D-501, G-528, P-239, P-506, P-507, P-510, P-513. 2-hour UL designs: D-501, D-502, G-523, G-524, G-525, G-526, G-527, G-529, J-502, L-211, P-237, P-241, P-501, P-514. 3-hour UL designs: G-523, G-527, G-529, J-502. Consult UL Fire Resistance Directory and revisions for further information and construction details.

Advantages

Labor Saving Factory-controlled module spacing and snap-lock connection of cross channels and cross tees with main tees cuts installation time.

Cost Saving Components are low in cost compared with conventional construction to achieve the same result.

Strength Strong metal components are designed with interlocking tabs and splicing mechanisms to resist twisting of assembly.

Accommodates Light Fixtures Accepts NEMA type G light fixtures.

System Components

Main Tee Conforms to ASTM C635 Heavy-Duty Main Tee Classification. Designed to support gypsum board ceiling with maximum deflection of 1/360 of the span. Double-web design, 38 mm (1-1/2″) high x 3660 mm (12′) long, rectangular top bulb, 24 mm (15/16″) wide flange, integral reversible end splice. Furring cross channel holes 102 mm (4″) from ends, spaced 203 mm (8″) o.c., hanger wire holes 102 mm (4″) o.c.

DGCL Cross Channel Hat-shaped formed section, 37 mm (1-7/16″) wide x 22 mm (7/8″) high knurled screw surface, integral end locks stamped at each end. For fire-rated assemblies.

DGLW Cross Tee 38 mm (1-1/2″) high, roll formed into double web design with rectangular bulb, 38 mm (1-1/2″) knurled face and a steel cap, high-tensile- steel double-locking and self-indexing end clenched to web. For fire-rated assemblies.

DGL Cross Tee 38 mm (1-1/2″) high, roll-formed into double-web design with rectangular top bulb, 24 mm (15/16″) exposed flange, high-tensile-steel double-locking and self-indexing end clenched to web.

Channel Moulding U-shape DGCM 25, 25.4 mm (1″) flange x 40 mm (1-9/16″) or 25.4 mm (1″) x 38 mm (1-1/2″) angle. L-shape DGWM 24, 25.4 mm (1″) x 38 mm (1-1/2″).

Hanger Wire Galvanized carbon steel, soft temper, prestretched, yield stress load at least five times design load, but not less than 12-gauge wire.

CGC Drywall Suspension System — Curved Surfaces

The CGC Drywall Suspension System is uniquely engineered to take advantage of curved metal framing components and flexible gypsum panels to produce arched and/or wavy ceiling surfaces. Framing components are formed channels in a variety of standard radii. The system is designed for direct screw attachment of gypsum panels.

The suspension system segments main tees with radii ranging from 787 mm (31″) to 7874 mm (310″) in both vault and valley shapes. The system easily accommodates transferring from straight to curved members and from concave to convex directions. Tees can be field cut to specific arc or chord lengths. Main tees are 3660 mm (144″) long before bending. Spans from single sections vary. Main tees and cross channels both have knurled surfaces to aid screw attachment of gypsum panels.

The system is completed with attachment of SHEETROCK Brand Gypsum Panels. Joints are taped and finished with a SHEETROCK Brand joint treatment system. Fire-rated constructions are achievable with multiple layers of the gypsum panels.

Advantages

Labor Saving Components are factory prepared for easy installation of the main-tee and cross-tee assembly.

Accuracy Uniform arched components assure accurate fit of attached components, including gypsum panels.

Esthetic Appearance Dynamic arched or wavy surface is esthetically pleasing.

Curved System Components

Curved Main Tees Conform to ASTM C635 Heavy Duty Main Tee Classification. 38 mm (1-1/2″) high, galvanized cold-rolled-steel tee with 24 mm (15/16″) flange comes with various radius curvatures in either concave or convex direction. Tee length before bending is 3660 mm (144″). Tee web is punched 102 mm (4″) from the end and thereafter at 203 mm (8″) intervals to accept cross channels. Web also is punched at 915 mm (3′) intervals with holes to accept hanger wire.

Cross Channel Hat-shaped, galvanized-steel channel has 37 mm (1-7/16″) wide knurled screw surface for convenient attachment of gypsum panels.

Hanger Wire Galvanized carbon steel, soft temper, prestretched, yield stress load at least five times design load, but not less than 12-gauge wire.

CGC Drywall Suspension System — Fascia Applications

A special feature of the CGC Drywall Suspension System is the array of fascia trim designed to finish edges that do not abut walls, soffits, or adjacent ceilings. The trim strips, called COMPÄSSO Trim, are available either flat or curved (convex or concave) to meet design requirements. Trim system is designed for parallel, perpendicular or angled attachment to suspension system tees.

Advantages

Labor Saving Components are factory prepared for easy installation.

Cost Saving Trim is low in cost compared with conventional construction to achieve the same result.

Esthetic Appearance Flat or curved fascia trim is esthetically pleasing.

COMPÄSSO Fascia Trim Components

COMPÄSSO Trim Available flat or in a variety of radii to match design requirements. Widths available up to 203 mm (8″).

COMPÄSSO Drywall Clip Provides ready attachment of COMPÄSSO Trim to main or cross tees, either parallel or perpendicular to the tee direction. Clip edges fit snugly inside trim edges; screw attach to tees.

Bead and Trim Accessories

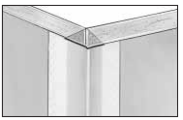
CGC sells and distributes construction, drywall and plastering steel products. These trim accessory products include corner reinforcements, beads, trims, control joints and decorative mouldings.

Paper Faced Metal Bead and Trim

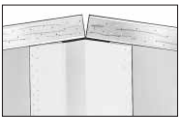
SHEETROCK/BEADEX Brand Paper Faced Metal Bead and Trim Paper faced metal corner bead ensures durable reinforcement of drywall corner and delivers positive adhesion of the bead face paper to the face of the panel. As a result, edge cracking is virtually eliminated, reducing contractor callbacks. Bead is applied using setting type, taping or all-purpose joint compound instead of nails to bond the bead to gypsum panel surfaces. Then bead edge is finished with typical joint treatment system. SHEETROCK/BEADEX Brand Paper Faced Metal Bead and Trim is available in a full range of types and sizes, including outside corners in regular and bullnose profiles, offset corners, flexible metal corner tape, inside corners, inner cove, L-shaped trim, J-shaped trim and reveal trim.

SHEETROCK/BEADEX Brand Paper Faced Metal Outside Corner, Tape On Bead (B1W, B1XW EL, B1 Super Side) For 90° outside corners. Suitable for use on any thickness of wallboard. Comes in several flange/paper widths: B1W—regular width, B1XW EL—extra wide, B1 Super Wide—super wide.

SHEETROCK/BEADEX Brand Paper Faced Metal Inside Corner, Tape On Trim (B2) Designed to form a true inner 90° corner. For use with any thickness of wallboard.

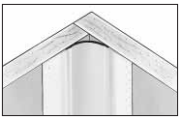


SHEETROCK/BEADEX Paper Faced Metal Offset Outside Corner, Tape On Bead (B1 OS) For 135° corners. Offset bead is designed to give a true offset corner with a smaller bead height for less compound fill. Can be used with any thickness of wallboard.



SHEETROCK/BEADEX Brand Paper Faced Metal Offset Inside Corner, Tape On Bead (B2 OS) Designed to provide a true offset angle on inside corners greater than 90°. Use on any thickness of wallboard.

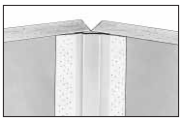
SHEETROCK/BEADEX Brand Paper Faced Metal 19 mm (3/4″) Bullnose Outside Corner, Tape On Bead (SLOC) Use to create a rounded 19 mm (3/4″) radius 90° corner angle. For use with 12.7 mm (1/2″) or 15.9 mm (5/8″) gypsum panels.



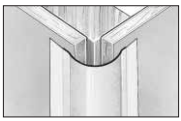
SHEETROCK/BEADEX Brand Paper Faced Metal Inner Cove, Tape On Trim (SLIC) Creates a rounded 19 mm (3/4″) radius 90° inside corner. For use with 12.7 mm (1/2″) or 15.9 mm (5/8″) gypsum panels.

SHEETROCK/BEADEX Brand Paper Faced Metal Bullnose Offset Outside Corner, Tape On Bead (SLOC OS) Forms a rounded 135° offset outside corner. Ideal for bay window offsets and similar applications.

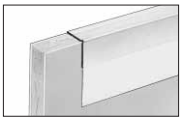
*Note- SHEETROCK Brand Paper Faced Metal Bead and Trim is sold in Eastern Canada.
BEADEX Brand Paper Faced Metal Bead and Trim is sold in Western Canada.



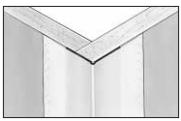
SHEETROCK/BEADEX Brand Paper Faced Metal Offset Inner Cove, Tape On Trim (SLIC OS) Forms a smooth cove for 135° inside corners.



SHEETROCK/BEADEX Brand Paper Faced Metal 38 mm (1-1/2″) Bullnose Outside Corner, Tape On Bead (Danish) Broader and gentler corner than 19 mm (3/4″) radius bullnose. Use with 12.7 mm (1/2″) or 15.9 mm (5/8″) thick wallboard.



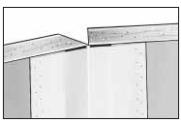
SHEETROCK/BEADEX Brand Paper Faced Metal "L" Shaped Tape On Trim (B4 Series) For use where wallboard abuts suspended ceilings, beams, plaster, masonry and concrete walls, as well as untrimmed door and window jambs.



SHEETROCK/BEADEX Brand Paper Faced Metal Outside Corner (Micro Bead) Reduced bead height results in less joint compound consumption. Extra wide flanges for maximum corner coverage.

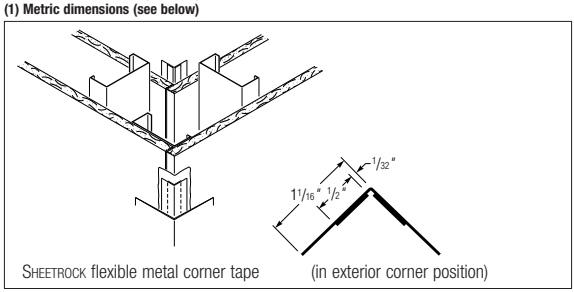
SHEETROCK/BEADEX Brand Paper Faced Metal Reveal, Tape On Trim (B4 NB) Modified tape-on "L" trim solves problems with reveals on soffits, wall offsets, ceilings, light boxes and other interior architectural features. B4 Reveal features a paper flange on both trim legs, eliminating the need to caulk the edge of reveal details and providing a cleaner, straighter line.

SHEETROCK/BEADEX Brand Paper Faced Metal "J" Shaped Tape On Trim (B9) Used to finish rough drywall panel ends. Ideal for use at window and door openings and casements.



SHEETROCK/BEADEX Brand Flexible Metal Corner Reinforcing Tape A flexible reinforcing tape that ensures straight, sharp corners on any angle (shown at left and below). Provides durable corner protection on cathedral and drop ceilings, arches and around bay windows. Tape is 52 mm (2-1/16″) wide and has 1.6 mm (1/16″) gap between two 12.7 mm (1/2″) wide galvanized steel strips. When folded, tape forms a strong corner bead. applied with standard joint compound feathered at the edges for a smooth wall surface. Also used to join drywall partition to plastered wall in remodeling and for repairing chipped and cracked corners. Available in convenient 30 m (100-ft). rolls in dispenser box.

(1) Metric dimensions (see below)



SHEETROCK flexible metal corner tape (in exterior corner position)

(1) Metric dimensions: 1/32" = 0.8 mm; 1/2" = 12.7 mm; 1-1/16" = 27 mm;

*Note- SHEETROCK Brand Paper Faced Metal Bead and Trim is sold in Eastern Canada.
BEADEX Brand Paper Faced Metal Bead and Trim is sold in Western Canada.

Metal Beads

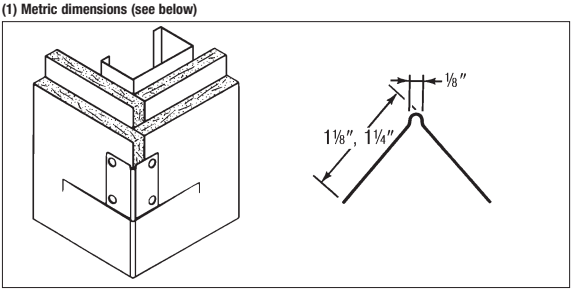
Metal corner beads permit positive fastening to studs and construction of true, concealed external angles with gypsum base and panels. The exposed nose of the bead helps prevent damage from impact and provides a screed for finishing.

Metal Corner Bead A specially galvanized steel reinforcement for protecting external corners in drywall construction. It is screwed or nailed to framing through the panels and concealed with CGC joint compounds as a smooth, finished corner. Flanges also may be attached with a clinch-on tool. Available in 32 mm (1-1/4″) x 32 mm (1-1/4″) flange width.

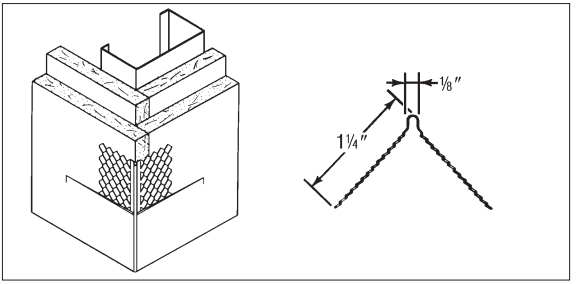
Expanded Flange Corner Bead No. 800 A galvanized steel external corner reinforcement with 32 mm (1-1/4″) wide fine-mesh expanded flanges, tapered along outer edges to enhance concealment. It is easily nailed or stapled. Provides superior bond to panels and base with joint compound and veneer plaster finishes through approx. 90 keys per lin. ft. It also provides the proper 1.6 mm (1/16″) grounds for one-coat veneer finishes.

Expanded Flange Corner Bead No. 900 Used with two-coat veneer plaster systems. It provides 2.4 mm (3/32″) grounds and its 32 mm (1-1/4″) fine-mesh flanges can be either stapled or nailed. Provides reinforcement equivalent to No. 800.

Metal Corner Bead



Expanded Flange Corner Bead, Nos. 800 and 900



(1) Metric dimensions: 1/8" = 3 mm; 1-1/8" = 28.6 mm; 1-1/4" = 32 mm;

Metal Trim

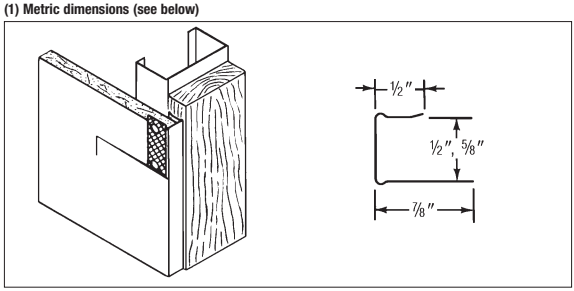
Metal Trims provide maximum protection and neat finished edges to gypsum panels and bases at window and door jambs, at internal angles and at intersections where panels abut other materials. Easily installed by nailing or screwing through the proper leg of trim. Made in following types and sizes:

L-Trim & J-Trim Galvanized steel casing for gypsum panels, J-shaped channel in 12.7 mm (1/2″) and 15.9 mm (5/8″) sizes; L-shaped angle edge trim without back flange to simplify application, in 12.7 mm (1/2″) and 15.9 mm (5/8″) sizes. Both require finishing with CGC joint compounds.

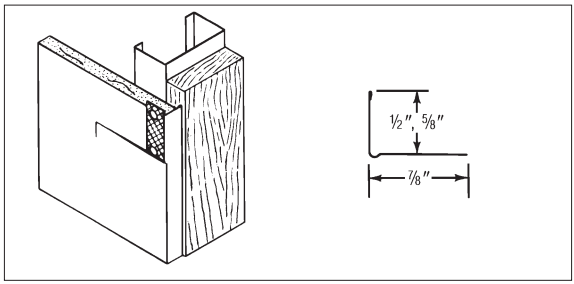
J-Stop Reveal type all-metal trim for drywall panels, requires no finishing compound, in 12.7 mm (1/2″) size, and in 15.9 mm (5/8″) size.

(1) Metric dimensions (see below)

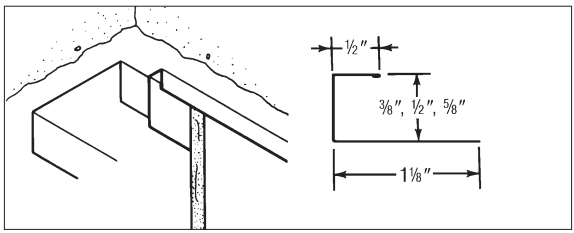
Metal J-Trim



Metal L-Trim



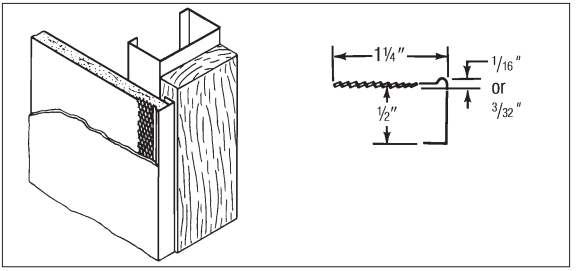
J-Stop



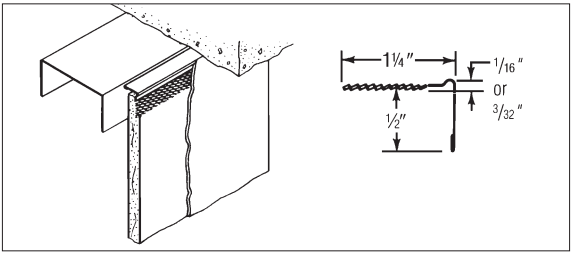
(1) Metric dimensions: 3/8" = 9.5 mm; 1/2" = 12.7 mm; 5/8" = 15.9 mm; 7/8" = 22 mm; 1-1/8" = 28.6 mm;

(1) Metric dimensions (see below)

No. 701-A Metal Trim
No. 801-A Metal Trim



No. 701-B Metal Trim
No. 801-B Metal Trim



(1) Metric dimensions: 1/16" = 1.6 mm; 3/32" = 2.4 mm; 1/2" = 12.7 mm; 1-1/4" = 32 mm;

Expanded Flange L-Trim & J-Trim, No. 700 series All-metal trim provides neat edge protection for two-coat veneer plaster finishes at cased openings and ceiling or wall intersections. Fine-mesh expanded flanges strengthen veneer bond and eliminate shadowing. No. 701-A J-shaped channel-type, and No. 701-B L-shaped angle edge trim provide 2.4 mm (3/32″) grounds; sizes for 12.7 mm (1/2″) and 15.9 mm (5/8″) thick gypsum base.

Expanded Flange L-Trim & J-Trim, No. 800 series All-metal trim companion to 700 series, but with 1.6 mm (1/16″) grounds for one-coat veneer plaster finishes or finishing with joint compound in drywall applications. Fine-mesh 32 mm (1-1/4″) expanded flanges strengthen veneer bond, eliminate shadowing, provide a superior key and are easily nailed or stapled. No. 801-A J-shaped channel-type, and No. 801-B L-shaped angle edge trim come in sizes for 12.7 mm (1/2″) and 15.9 mm (5/8″) thick panels and bases.

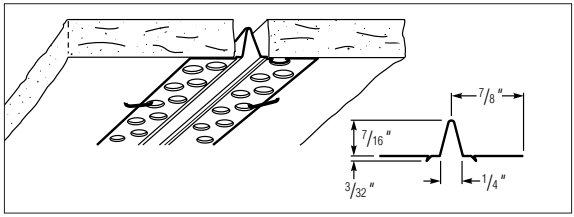
Control Joints

Control Joints are used to relieve stresses induced by expansion and contraction in large ceiling and wall expanses in drywall and veneer plaster systems. Used from door header to ceiling; from floor to ceiling in long partitions and wall furring runs; from wall to wall in large ceiling areas. Made from roll-formed zinc to resist corrosion. The control joint is covered with a roll-formed zinc trim member with a 6.4 mm (1/4″) slot protected by plastic tape which is removed after finishing.

Zinc Control Joint No. 093 For interior applications. Provides 2.4 mm (3/32″) grounds for drywall and veneer finishes. Staple-applied to panel face. Requires finishing. Limitation: Where fire and sound control are prime considerations, a seal must be provided behind the control joint.

Control Joint No. 93

(1) Metric dimensions (see below)



(1) Metric dimensions: 3/32" = 2.4 mm; 1/4" = 6.4 mm; 7/16" = 11 mm; 7/8" = 22 mm;

Framing Components

CGC pioneered the development of steel framing components for gypsum construction. They offer the advantages of light weight, low material cost, quick erection, and superior strength and versatility in meeting job requirements.

Today, steel studs and runners are available from a number of manufacturers. It is important to note that while manufacturers produce the same gauge of material, the steel properties and thicknesses can vary from manufacturer to manufacturer. To assure the best system performance, manufacturer specifications should be checked against the design and minimum thicknesses provided by CGC. Failure to do so could result in excessive deflection, overstressed or even buckled steel studs.

CGC does not sell common steel framing, however, the following provides a description of framing components that are used in CGC partitions.

It is important that light-gauge steel components such as steel studs and runners, furring channels and resilient channels be adequately protected against rusting in the warehouse and on the job site.

Steel Studs and Runners

Steel studs and runners are channel-type, roll-formed from corrosion-resistant steel, and designed for quick screw attachment of facing materials. They are strong, non-load bearing components of interior partitions, ceilings and column fireproofing and as framing for exterior curtain wall systems. Heavier thickness members are used in load-bearing construction. Limited chaseways for electrical and plumbing services are provided by punchouts in the stud web. Matching runners for each stud size align and secure studs to floors and ceilings, also functioning as headers.

25-ga. 0.46 mm (18-mil) Studs and Runners Efficient, low-cost 25-ga. members for framing non-load bearing interior assemblies. Studs come in widths to match wood framing dimensions and are available in lengths up to 6100 mm (20-ft.) Runners come in matching stud widths—3050 mm (10-ft.) lengths. Not recommended for high-density board applications, such as for DUROCK Brand Cement Board or FIBEROCK Brand Abuse-Resistant Panels.

22-ga. 0.72 mm (27-mil) Studs and Runners Heavier gauge, stronger studs in widths of 64 mm (2-1/2″), 92 mm (3-5/8″), 102 mm (4″) and 152 mm (6″). Runners come in widths to match studs. Not recommended for high-density board applications, such as for DUROCK Brand Cement Board or FIBEROCK Brand Abuse-Resistant Panels.

20-ga. 0.84 mm (33-mil) Studs and Runners Heavier 20-ga. members used in framing interior assemblies requiring greater-strength studs, and reinforcement for door frames. Also used in curtain wall assemblies.

Studs available in 64 mm (2-1/2″), 92 mm (3-5/8″), 102 mm (4″), 152 mm (6″) widths—cut-to-order lengths up to 8535 mm (28 ft.) Runners come in stud widths, 3050 mm (10-ft.) lengths.

Studs and Runners should be hot-dip galvanized.

Load-Bearing Studs and Runners Used for framing load-bearing interior and exterior walls and non-load bearing curtain walls. These studs have stiffened flanges and are available in several sizes.

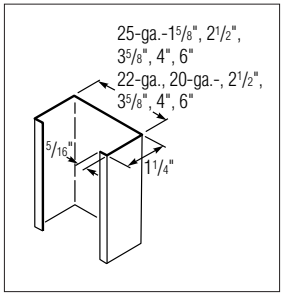
Typical Steel Thickness—Steel Studs and Runners(1)

	Design(2)		Minimum(2)	
Stud/Runner Gauge(3)	**mm**	**in.**	**mm**	**in.**
25	0.48	0.0188	0.45	0.0179
22	0.72	0.0283	0.68	0.0269
20	0.88	0.0346	0.84	0.0329
18	1.15	0.0451	1.09	0.0428
16	1.44	0.0566	1.37	0.0538
14	1.82	0.0713	1.72	0.0677
12	2.59	0.1017	2.45	0.0966

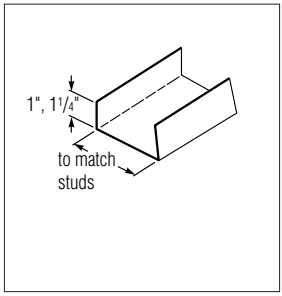
(1) Uncoated steel thickness; must meet ASTM A568. Studs and runners meet ASTM C645. Coatings are hot-dip galvanized per ASTM A653 or aluminum-zinc per ASTM A792 or ASTM A591(weight equivalent of A653). (2) Data is from Steel Stud Manufacturers Association (SSMA) catalog. (3) For information only; refer to limiting height tables and structural properties for design data.

There is a serious misconception within the construction industry regarding the substitution of one manufacturer's studs for those of another manufacturer. The assumption is that all studs of a given size and steel thickness are interchangeable. It is possible that the substitution can safely be made, but the decision should not be made until the structural properties of the studs involved are compared. Most reliable manufacturers publish structural property tables in their technical literature. CGC includes recommended minimum thickness data in all architectural technical literature covering steel-framed systems.

(1) Metric dimensions (see below)



Steel stud
(25, 22, 20, 18, 16, 14-ga.)



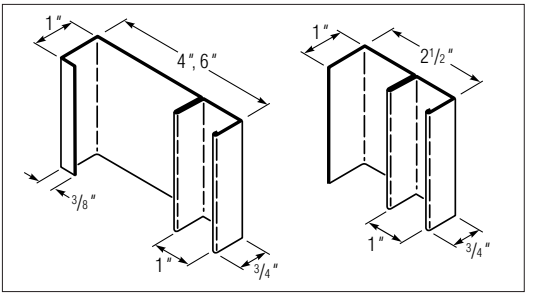
Steel runner
(25, 22, 20, 18, 16, 14-ga.)

(1) Metric dimensions: 5/16" = 8 mm; 1" = 25 mm; 1-1/4" = 32 mm; 1-5/8" = 41 mm; 2-1/2" = 64 mm; 3-5/8" = 92 mm; 4" = 102 mm; 6" = 152 mm;

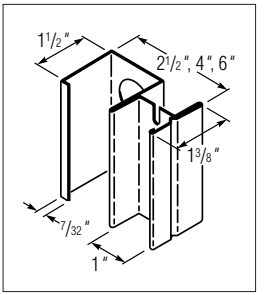
Cavity Shaft Wall & Area Separation Fire Wall/Party Wall Components

These steel components are lightweight, versatile non-load bearing members of economical, fire and sound-barrier systems: (1) Area Separation Walls between units in multifamily wood-frame buildings; (2) Shaft Walls around elevator and mechanical shafts, return air ducts, stairwells and smoke shafts in multi-story buildings. Components are formed from corrosion-resistant steel: C-H Stud base metal meets structural performance standards in ASTM A446, Grade A. Components should be hot-dipped galvanized.

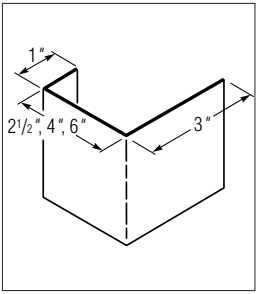
(1) Metric dimensions (see below)



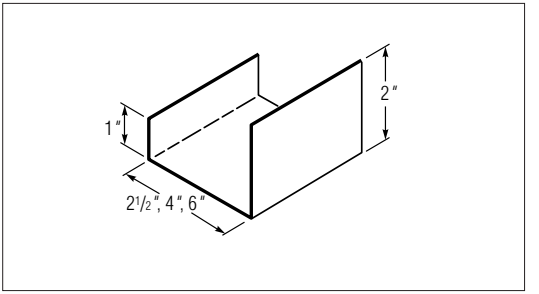
Steel E-studs



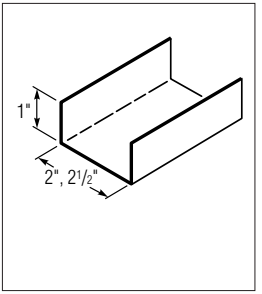
Steel C-H stud



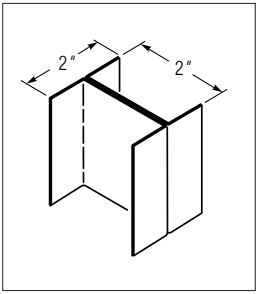
Steel jamb strut (20 ga.)



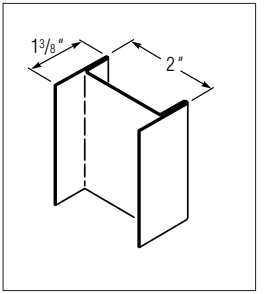
Steel J-runner



Steel C-runner



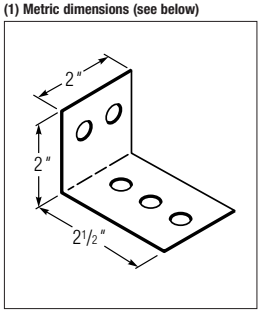
Steel H-stud (two piece)



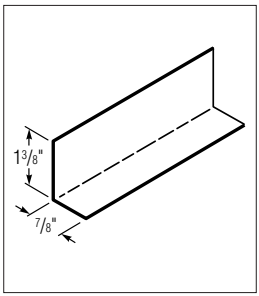
Steel H-stud (one piece)

(1) Metric dimensions: 7/32" = 5.6 mm; 3/8" = 9.5 mm; 3/4" = 19 mm; 1" = 25 mm; 1-3/8" = 35 mm; 1-1/2" = 38 mm; 2" = 51 mm; 2-1/2" = 64 mm; 3" = 76 mm; 4" = 102 mm; 6" = 152 mm;

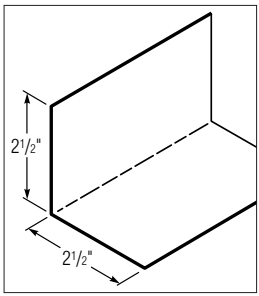
(1) Metric dimensions (see below)



Breakaway clip



Metal angle runner



Corner angle

(1) Metric dimensions: 7/8" = 22 mm; 1-3/8" = 35 mm; 2" = 52 mm; 2-1/2" = 64 mm;

Thickness—Area Separation, Shaft Wall and Furring Components(1)

Component Designation	Design(2) mm	Design(2) in.	Minimum mm	Minimum in.	Gauge(3)
CR, CH, ES25	0.48	0.0188	0.45	0.0179	25
JR24	0.61	0.0239	0.58	0.0227	24
Metal Angles	0.61	0.0239	0.58	0.0227	24
CH22	0.79	0.0310	0.75	0.0294	22
ES, JR, JS, CH20	0.91	0.0359	0.87	0.0341	20

(1) Uncoated steel thickness; meets ASTM A568. Studs and runners meet ASTM C645. Base metal meets ASTM A446 standards for structural performance. Min. yield strength 228 Mpa (33 ksi), except C-H stud 276 Mpa (40 ksi). Coatings are hot-dip galvanized per ASTM A525; aluminized per ASTM A463, or aluminum-zinc per ASTM A792. (2) Conforms to AISI Specification for the Design of Cold Formed Steel Structural Members, 1986 edition. (3) For information only; refer to limiting height tables and structural properties for design data.

Cavity Wall Components 64 mm (2-1/2″), 102 mm (4″) and 152 mm (6″) wide and designed for use with 25 mm (1″) thick SHEETROCK Brand Gypsum Liner Panels. CGC Steel C-H Studs 64 mm (2-1/2″), 102 mm (4″) and 152 mm (6″) are non-load bearing sections installed between abutting liner panels. They have 25 mm (1″) holes spaced 300 mm (12″) to 400 mm (16″) from each end for easy installation of horizontal pipe and conduit. CGC Steel E-Studs are 64 mm (2-1/2″), 102 mm (4″) or 152 mm (6″) wide, used singly to cap panels at intersections with exterior walls or back-to-back as studs in unusually high partitions. CGC Steel J-Runners, made with unequal legs, are used at floor and ceiling in Shaft Walls. CGC Steel C-Runners are used singly at terminals, top and bottom of wall and back-to-back between vertical liner panels at intermediate floors, in Area Separation Walls. CGC Steel Jamb Struts (20-gauge), 64 mm (2-1/2″), 102 mm (4″) and 152 mm (6″) wide, are used in jamb framing for fire-rated elevator doors.

Solid Wall Components 52 mm (2″) wide and used with two thicknesses of 25 mm (1″) Gypsum Liner Panels. CGC Steel H-Studs fit over and engage edges of adjacent liner panels. CGC Steel C-Runners are used in area separation walls as floor and top runners and back-to-back between liner panels at intermediate floors. Also used singly to cap Area Separation Walls.

CGC Aluminum Breakaway Clip A 52 mm (2″) wide angle clip made of 16 mm (0.63″) thick aluminum. Used to attach Area Separation Walls to intermediate floor and roof framing. Clips are designed to melt and break away when exposed to fire. 64 x 52 mm (2-1/2″ x 2″); approx. 27 kg/1,000 (60 lb./1,000) pcs.

Specifications—Area Separation Wall & Shaft Wall Components

Component	Section Depth		Length		Approx. Weight	
Designation[1]	mm	in.	mm	ft.	kg/100 m	lb./1000 ft.
C-H Studs						
212CH25	64	2-1/2	2440 to 3910	8 to 12′ 10″	77.2	519
212CH20	64	2-1/2	2440 to 5840	8 to 19′ 2″	148.8	1000
400CH25	102	4	2440 to 5150	8 to 16′ 11″	91.1	612
400CH20	102	4	2440 to 6960	8 to 22′ 10″	185.3	1245
600CH20	152	6	2440 to 8530	8 to 28	203.3	1366
E-Studs						
212ES25	64	2-1/2	2440 to 3910	8 to 12′ 10″	53.3	358
212ES20	64	2-1/2	2440 to 5840	8 to 19′ 2″	108.5	729
400ES25	102	4	2440 to 5150	8 to 16′ 11″	70.2	472
400ES20	102	4	2440 to 6960	8 to 22′ 10″	144.3	970
600ES20	152	6	2440 to 8530	8 to 28	191.2	1285
J-Runners						
212JR24	64	2-1/2	3050	10	79.6	535
212JR20	64	2-1/2	3050	10	109.5	736
400JR24	102	4	3050	10	101.2	680
400JR20	102	4	3050	10	139.4	937
600JR24	152	6	3050	10	128.0	860
600JR20	152	6	3050	10	177.2	1191
C-Runners						
200CR25	51	2	3050	10	40.1	270
Metal Angles						
64 x 64 mm (2-1/2″ x 2-1/2″)	64	2-1/2	3050	10	63.2	425
35 x 22 mm (1-3/8″ x 7/8″)	35	1-3/8	3050	10	28.3	190
Jamb Strut						
212JS20	64	2-1/2	2440 to 3660	8 to 12	122.9	826
400JS20	102	4	2440 to 3660	8 to 12	152.7	1026
600JS20	152	6	2440 to 3660	8 to 12	186.9	1256

(1) All components shipped unbundled, additional charge for bundling.

Framing & Furring Accessories

Metal Angles Made of 24-ga. galvanized steel in two standard sizes. The 35 x 22 mm (1-3/8″ x 7/8″) size is used to secure 25.4 mm (1″) liner panels at floor and ceiling in laminated gypsum drywall partitions. Length: 3050 mm (10 ft.). Angles in other sizes and gauges available.

Cold-Rolled Channels Made of 16-ga. steel. Used in furred walls and suspended ceilings. Available either galvanized or black asphaltum painted. Sizes 19 mm (3/4″) with 12.7 mm (1/2″) flange, 38 mm (1-1/2″) and 51 mm (2″) with 13.5 mm (17/32″) flange; lengths 3668 mm (12), 4880 mm (16) and 6100 mm (20) ft. (see page 34).

RC-1 Resilient Channel Made of 25-ga. corrosion resistant steel. One of the most effective, lowest-cost methods of improving sound transmission loss through wood and steel-frame partitions and ceilings.

Used for resilient attachment of SHEETROCK Brand Gypsum Panels and GRAND PRIX Brand Veneer Plaster Bases. Prepunched holes 102 mm (4″) o.c. in the flange facilitate screw attachment to framing; facing materials are screw-attached to channels. Size 12.7 x 64 mm (1/2″ x 2-1/2″); length 3660 mm (12 ft.); (see page 34).

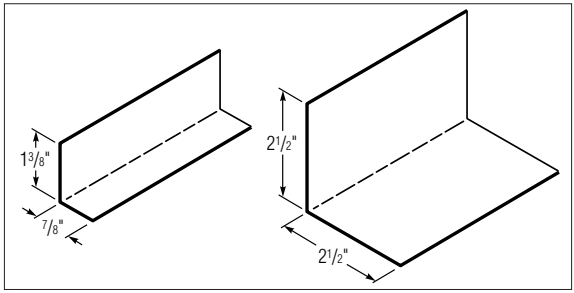
Limitation: not for use beneath highly flexible floor joists; should be attached to ceilings with 32 mm (1-1/4″) Type W or TYPE S Screws only—nails must not be used; see Framing Requirements, Chapter 2.

Z-Furring Channels Made of min. 24-ga. corrosion-resistant steel used to mechanically attach THERMAFIBER FS-15 Insulating Blankets, polystyrene insulation (or other rigid insulation) and gypsum panels or base to interior side of monolithic concrete and masonry walls. Sizes 25.4 mm (1″), 38 mm (1-1/2″), 52 mm (2″), 76 mm (3″); length 2590 mm (8′6″), (see page 34).

Metal Furring Channels Roll-formed, hat-shaped sections made of 20 and 25-ga. corrosion resistant steel. They are designed for screw attachment of gypsum panels and gypsum base in wall and ceiling furring. Size 22 x 65 mm (7/8″ x 2-9/16″); length 3660 mm (12 ft.); (see page 34).

Hanger and Tie Wire Galvanized soft annealed wire available in three sizes: 8-ga. wire, used for hangers in suspended ceiling grid work, available in 23 kg (50-lb.) coils (approx. 222.5 m (730′)); 12-ga. wire for the CGC Drywall Suspension System; 18-ga. wire, used for wire-tying channels in wall furring and ceiling construction, available in 23 kg (50-lb.) coils (approx. 2533 m (8,310′)) and 11 kg (25-lb.) hanks (1220 mm (48″) straight lengths—1264 mm (4,148′) total) (see page 35).

(1) Metric dimensions (see below)

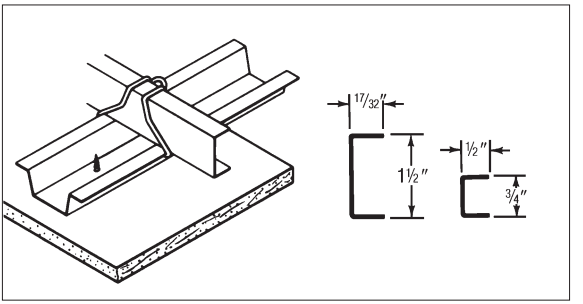


Metal angles

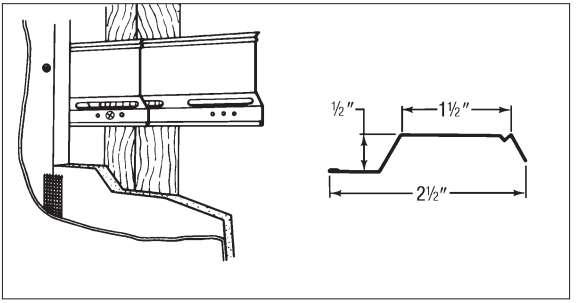
(1) Metric dimensions: 7/8" = 22 mm; 1-3/8" = 35 mm; 2-1/2" = 64 mm;

(1) Metric dimensions (see below)

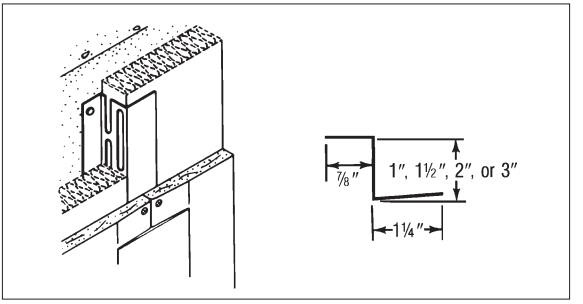
Cold-rolled channel



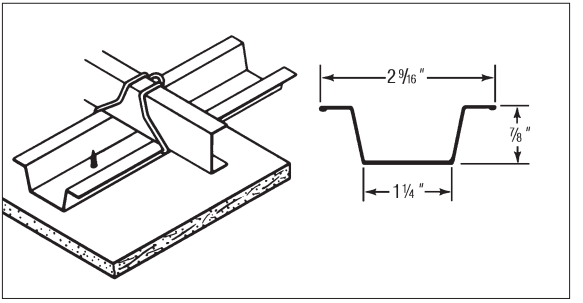
RC-1 resilient channel



Z-furring channel

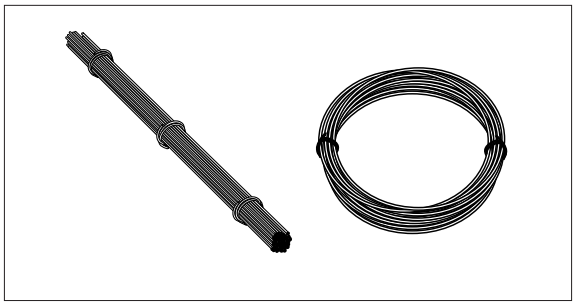


Metal furring channel



(1) Metric dimensions: 1/2" = 12.7 mm; 17/32" = 13.5 mm; 3/4" = 19 mm; 7/8" = 22 mm; 1" = 25 mm; 1-1/4" = 32 mm; 1-1/2" = 38 mm; 2" = 51 mm; 2-1/2" = 64 mm; 2-9/16" = 65 mm; 3" = 76 mm;

Hanger and tie wire



Sound Control and Insulation Products

Adequate sound control and energy conservation are among the most important requirements in today's buildings. The public has become sufficiently aware of these factors to demand effective measures to control unwanted sound and heat transfer in both commercial and residential construction. With its advanced research, CGC has been a leader in developing new systems and products for efficient, low-cost sound control and thermal insulation for new construction and remodeling.

THERMAFIBER Mineral Fiber Insulation products are manufactured by Thermafiber LLC and marketed by CGC. They meet every important insulation need—thermal, acoustical and fire protection. They provide superior resistance to heat and sound transmission, resilience that assures full installed thickness and outstanding durability.

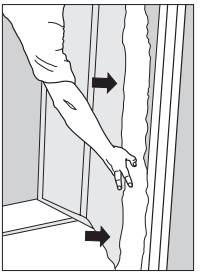
THERMAFIBER Insulation products consist of spun mineral fibers formed into mats of varying dimensions and densities, or into nodules for pouring or blowing into framing spaces.

The use of THERMAFIBER Insulation products increases fire ratings of certain partition assemblies—provides greater fire resistance than low-melt point, glass-fiber insulation. Products without facings are rated noncombustible as defined by NFPA 220 when tested per ASTM E136.

THERMAFIBER Insulation Blankets offer excellent sound-absorbing properties, in addition to providing thermal values. When used in partition cavities, THERMAFIBER Insulation improved STC ratings up to nine points. All THERMAFIBER Insulation products are asbestos-free. They resist decay, corrosion and moisture, and will not support vermin.

Insulation Blankets

THERMAFIBER Sound Attenuation Fire Blanket



THERMAFIBER Sound Attenuation Fire Blankets fit snugly between steel studs

CGC sells and distributes insulation blankets that are compatible with the company's other products and meet the performance specification for the company's recommended and tested systems. The best fire protection and sound attenuation characteristics have been shown in tested systems using insulation blankets or batts produced by THERMAFIBER LLC.

THERMAFIBER Sound Attenuation Fire Blankets (SAFB) Paperless, semi-rigid spun mineral fiber mat which substantially improves STC ratings when used in stud cavities of CGC partition assemblies. Each blanket has a dense, highly complex labyrinthine structure composed of fibers which produce millions of sound-retarding air pockets. Easily handled and cut; simple to install. Meet ASTM C665, Type I.

Creased THERMAFIBER Sound Attenuation Fire Blankets (SAFB) Creased THERMAFIBER SAFB offers the most economical drywall and veneer plaster sound systems in the 50 to 55 STC range. These fire-rated systems are ideal for party and corridor walls in hotels, motels, offices and multi-family dwellings.

The Creased THERMAFIBER SAFB system is a patented insulation blanket assembly that is 25.4 mm (1″) wider than regular blankets. In the field, a 25.4 mm (1″) deep vertical cut is made in the center and for the full length of the blanket. The cut enables the wider-than-normal insulating blanket to be buckled and the edges fitted into the partition stud cavity. Installation of SHEETROCK Brand Gypsum Panels on the creased side compresses the insulation blanket, applying pressure both to the studs and the drywall. The applied pressure dampens sound vibrations in the partition and boosts its STC rating. For example, a single-layer drywall partition with Creased THERMAFIBER SAFB has the same STC rating as an unbalanced drywall partition with standard THERMAFIBER SAFB.

Specifications—THERMAFIBER Blankets[1]

	Thickness		Width		Length		Nom. Density		Thermal Resistance[2]	
product	mm	in.	mm	in.	m	ft.	kg/m³	lb./ft.³	RSI	R[3]
Sound Attenuation Fire Blankets (SAFB)	25	1	406, 610	16, 24	1.22	4	0.25	4.0	0.7	4
	38	1-1/2	406, 610	16, 24	1.22	4	0.16	2.5	1.0	5.6
	51	2	406, 610	16, 24	1.22	4	0.16	2.5	1.3	7.4
	76	3	406, 610	16, 24	1.22	4	0.16	2.5	2.0	11.1

(1) Check local availability of package sizes.

(2) C factor $= \frac{1}{R}$; K factor $= \frac{1}{R/\text{thickness}}$

(3) "R" value at 24° C (75° F), without facing.

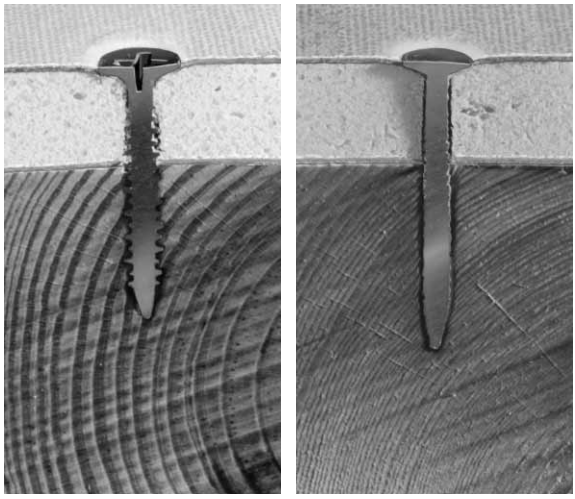
Fasteners

Gypsum Board Screws

Screws are corrosion-resistant and all (except Hex Washer Head type) have a Phillips-head recess for rapid installation with a special bit and power-driven screw gun. The bugle head spins the face paper into the cavity under the screwhead for greater holding power and helps prevent damage to the gypsum core and face paper. Defects associated with improper nail dimpling are eliminated. Other head types are designed specifically for attaching metal to metal and installing wood and metal trim. Screws meet ASTM C1002 (TYPE S and Type W) and ASTM C954 (TYPE S-12)

TYPE S Screws have specially designed drill point and threads that minimize stripping, provide maximum holding power and pull-through resistance in steel studs and runners. TYPE S Screws are designed for use with steel up to 1 mm (.04″) thick; TYPE S-12 Screws for steel from 1 mm (.04″) to 1.8 mm (.07″) thick (see table, below). The special threads on Type G and Type W Screws offer superior holding power in attachment to gypsum boards and wood framing, respectively. TAPCON Anchors provide fast, safe attachment of steel components to poured concrete and concrete block surfaces. Special 49 mm (1-15/16″) TYPE S-12 Bugle Head Pilot Point Screws are designed for attachment of plywood to steel joists and studs.

The superior pull-through resistance of Type W Screws has virtually eliminated loose panel attachment and nail pops in wood-frame construction. Tests have shown the Type W Screw to have 350% greater pullout strength than GWB-54 nails. Fewer screws than nails are generally required, and the speed of installation using electric screwguns compares favorably with nailing.



Secret to superiority of screw attachment is shown by comparative diagrams. Bugle-head (left) screw depresses face paper of gypsum panel without tearing; threads cut into and deform wood to hold tightly. Longer drywall nail (right) grips with friction, loosens hold as wood shrinks, which may pop nailhead above surface to create callback situation.

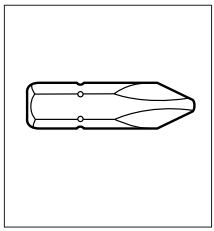
Selector Guide for Screws

Fastening Application	Fastener used	Fig[2]
Gypsum panels to steel framing[1]		
12.7 mm (1/2″) single-layer panels to steel studs, runners, channels	25 mm (1″) Type S bugle head	1
15.9 mm (5/8″) single-layer panels to steel studs, runners, channels	25 mm (1″) Type S bugle head 29 mm (1-1/8″) Type S bugle head	1 1
19 mm (3/4″) single-layer panels to steel studs, runners, channels	32 mm (1-1/4″) Type S bugle head	1
25.4 mm (1″) coreboard to metal angle runners in solid partitions	41 mm (1-5/8″) Type S bugle head	1
12.7 mm (1/2″) double-layer panels to steel studs, runners, channels	41 mm (1-5/8″) Type S bugle head	1
15.9 mm (5/8″) double-layer panels to steel studs, runners, channels	41 mm (1-5/8″) Type S bugle head	2
19 mm (3/4″) double-layer panels to steel studs, runners, channels	57 mm (2-1/4″) Type S bugle head	2
12.7 mm (1/2″) panels through coreboard to metal angle runners in solid partitions	47 mm (1-7/8″) Type S bugle head	2
15.9 mm (5/8″) panels through coreboard to metal angle runners in solid partitions	57 mm (2-1/4″) Type S bugle head 76 mm (3″) Type S bugle head	2 2
25.4 mm (1″) double-layer coreboard to steel studs, runners	67 mm (2-5/8″) Type S bugle head	2
Wood to steel framing		
Wood trim over single-layer panels to steel studs, runners	25 mm (1″) Type S or S-12 trim head 41 mm (1-5/8″) Type S or S-12 trim head	5 5
Wood trim over double-layer panels to steel studs, runners	57 mm (2-1/4″) Type S or S-12 trim head	5
Steel cabinets, brackets through single-layer panels to steel studs	32 mm (1-1/4″) Type S oval head	6
Wood cabinets through single-layer panels to steel studs	41 mm (1-5/8″) Type S oval head	6
Wood cabinets through double-layer panels to steel studs	57 mm (2-1/4″), 73 mm (2-7/8″), 95 mm (3-3/4″) Type S oval head	6
Steel studs to door frames, runners		
Steel studs to runners 25 & 22-ga.	9.5 mm (3/8″) Type S pan head	9
Steel studs to runners		
Steel studs to door frame jamb anchors 20-ga.	9.5 mm (3/8″) Type S-12 pan head 16 mm (5/8″) Type S-12 low-profile head	10 11
Other metal-to-metal attachment (12-ga. max.)		
Steel studs to door frame jamb anchor clips (heavier shank assures entry in clips of hard steel)	13 mm (1/2″) Type S-12 pan head 16 mm (5/8″) Type S-12 low-profile head	10 11
Metal-to-metal connections up to double thickness of 12-ga. steel	19 mm (3/4″) S-4 hex washer head Anticorrosive-coated	12
Gypsum panels to 12-ga. (max.) steel framing		
12.7 mm (1/2″) and 15.9 mm (5/8″) panels and gypsum sheathing to steel studs and runners; specify anticorrosive-coated screws for exterior curtain wall applications	25 mm (1″) Type S-12 bugle head	3
Self-Furring Metal Lath and brick wall ties through gypsum sheathing to steel studs and runners; specify anticorrosive-coated screws for exterior curtain wall applications	32 mm (1-1/4″) Type S-12 bugle head 32 mm (1-1/4″) Type S-12 pancake head	4 13
12.7 mm (1/2″) and 15.9 mm (5/8″) double-layer gypsum panels to steel studs and runners	41 mm (1-5/8″) Type S-12 bugle head	4

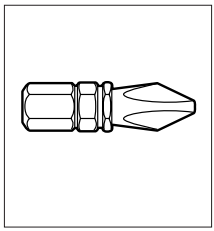
Selector Guide for Screws continued

Fastening Application	Fastener used	Fig[2]
Gypsum panels to 12-ga. (max.) steel framing		
Multilayer gypsum panels and other materials to steel studs and runners	48 mm (1-7/8″), 52 (2), 60 mm (2-3/8″), 67 mm (2-5/8″), 76 mm (3″) TYPE S-12 bugle head	4
Cement board to steel framing		
DUROCK Brand Cement Board or Exterior Cement Board direct to steel studs, runners	32 mm (1-1/4″), 41 mm (1-5/8″) DUROCK Brand Steel Screws	17
Rigid foam insulation to steel framing		
Rigid foam insulation panels to steel studs and runners; Type R for 20- 25-ga. steel	38 mm (1-1/2″), 52 (2), 64 mm (2-1/2″), 76 mm (3″) TYPE S-12 or R wafer head	15
Aluminum trim to steel framing		
Trim and door hinges to steel studs and runners (screw matches hardware and trim)	22 mm (7/8″) TYPE S-18 oval head anticorrosive-coated	7
Batten strips to steel studs in demountable partitions	29 mm (1-1/8″) TYPE S bugle head	1
Aluminum trim to steel framing in demountable and UTRAWALL partitions	6 mm (1/4″) TYPE S bugle head anticorrosive-coated	1
Gypsum panels to wood framing		
9.5 mm (3/8″), 12.7 mm (1/2″) and 15.9 mm (5/8″) single-layer panels to wood studs, joists	32 mm (1-1/4″) TYPE W bugle head	8
Cement board to wood framing		
DUROCK Brand Cement Board or Exterior Cement Board to wood framing	32 mm (1-1/4″), 41 mm (1-5/8″), 57 mm (2-1/4″) DUROCK Brand Wood Screws, with anticorrosive coating	18
Resilient channels to wood framing		
Screw attachment required for both ceilings and partitions	32 mm (1-1/4″) Type W bugle head	8
	32 mm (1-1/4″) TYPE S bugle head	1
For fire-rated construction	32 mm (1-1/4″) TYPE S bugle head	1
Gypsum panels to gypsum panels		
Multilayer adhesively laminated gypsum-to-gypsum partitions (not recommended for double-layer 9.5 mm (3/8″) panels)	38 mm (1-1/2″) Type G bugle head	8
Plywood to steel joists		
9.5 mm (3/8″) to 19 mm (3/4″) plywood to steel joists (penetrates double thickness 14-ga.)	33 mm (1-5/16″) TYPE S-12 bugle head, pilot point	16
Steel to poured concrete or block		
Attachment of steel framing components to poured concrete and concrete block surfaces	2 mm (3/16″) x 45 mm (1-3/4″) acorn slotted HWH TAPCON Anchor	14

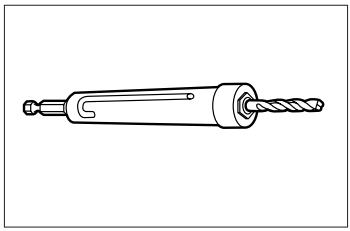
Notes: (1) Includes 25, 22 and 20-ga. steel studs and runners; metal angles; metal furring channels; resilient channels. If channel resiliency makes screw penetration difficult, use screws 3 mm (1/8″) longer than shown to attach panels to resilient channels. For other gauges of studs and runners, always use TYPE S-12 screws. For steel applications not shown, select a screw length which is at least 10 mm (3/8″) longer than total thickness of materials to be fastened. Use anticorrosive-coated screws for exterior applications. (2) Figures refer to screw illustrations on page 40.



No. 1 Bit for trim and pancake heads

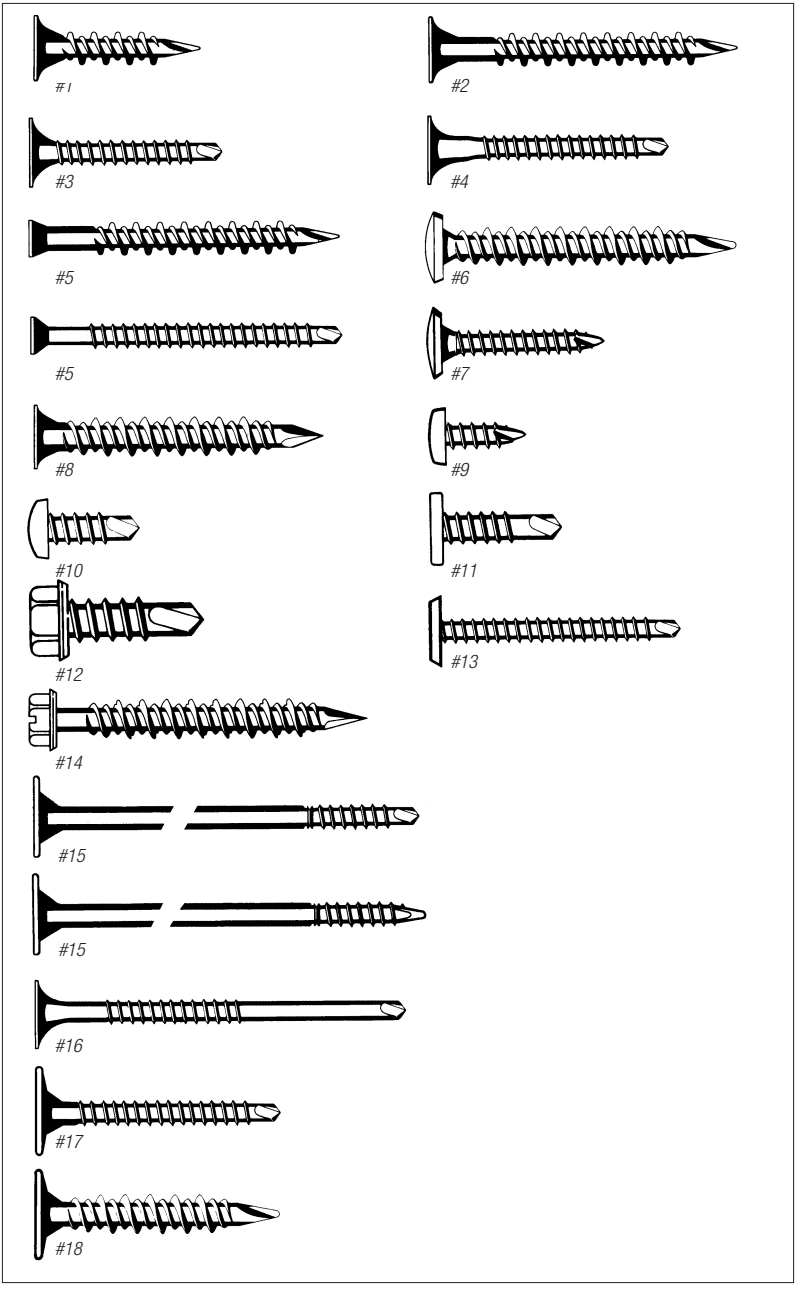


No. 2 Bit for bugle pan, wafer, low-profile & oval heads



CONDRIVE Tool/Bit for HWH TAPCON Anchors
Note: Hex-head bit not illustrated

Basic Types of Screws — Numbers refer to descriptions on pages 38-39.

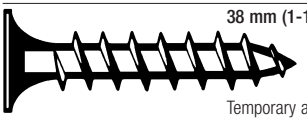


Specifications— Screws

	Length		Type	Head
Description	**mm**	**in.**		
Base Screws	25	1	Type S	bugle
	29	1-1/8	Type S	bugle
	32	1-1/4	Type S	bugle
	41	1-5/8	Type S	bugle
	48	1-7/8	Type S	bugle
	57	2-1/4	Type S	bugle
	67	2-5/8	Type S	bugle
	76	3	Type S	bugle
Specialty Screws	10	3/8	Type S	pan
	10	3/8	Type S-12	pan
	13	1/2	Type S-12	pan
	13	1/2	Type S-12	pancake
	13	1/2	Type S-16	pan(1)
	16	5/8	Type S-12	low-profile
	19	3/4	Type S-4	hex washer(1)
	22	7/8	Type S-18	oval(1)
	25	1	Type S	trim
	25	1	Type S-12	trim
	25	1	Type S-12	bugle
	32	1-1/4	Type S-12	bugle
	32	1-1/4	Type S	bugle(1)
	32	1-1/4	Type W	bugle
	32	1-1/4	Type S-12	pancake
	32	1-1/4	Type S	oval
	38	1-1/2	Type G	bugle
	38	1-1/2	Type R	wafer
	38	1-1/2	Type S-12	wafer
	41	1-5/8	Type S	oval
	41	1-5/8	Type S	trim
	41	1-5/8	Type S-12	bugle
	41	1-5/8	Type S-12	trim
	48	1-7/8	Type S-12	bugle
	49	1-15/16	Type S-12	bugle, pilot pt.
	51	2	Type S-12	bugle
	51	2	Type R	wafer
	51	2	Type S-12	wafer
	57	2-1/4	Type S	trim
	57	2-1/4	Type S	oval
	57	2-1/4	Type S-12	trim
	60	2-3/8	Type S-12	bugle
	64	2-1/2	Type R	wafer
	64	2-1/2	Type S-12	wafer
	67	2-5/8	Type S-12	bugle
	73	2-7/8	Type S	oval
	76	3	Type S-12	bugle
	76	3	Type R	wafer
	76	3	Type S-12	wafer
	95	3-3/4	Type S	oval
Tapcon Screw	45	1-3/4	conc.	hex

(1) Anticorrosive-coated

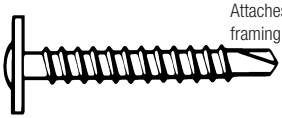
Screw Applications

	Application	Screw Size and Length (no. x mm (Inches))
	**25 mm (1″) Bugle Head Type S** Attaches 12.7 mm (1/2″) or 15.9 mm (5/8″) single-layer gypsum panels and bases to steel framing.	6x25.4(1)
	**29 mm (1-1/8″) Bugle Head Type S** Attaches 15.9 mm (5/8″) gypsum panels and bases to resilient channels or other steel framing, also batten strips for demountable partitions.	6x28.6(1-1/8)
	**32 mm (1-1/4″) Bugle Head Type S** Attaches 25.4 mm (1″) coreboard to steel runners. Attaches 12.7 mm (1/2″), 15.9 mm (5/8″) and 19 mm (3/4″) gypsum panels and bases to wood studs.	6x31.8(1-1/4)
	**41 mm (1-5/8″) Bugle Head Type S** Attaches double-layer gypsum panels to steel framing.	6x41.3(1-5/8)
	**51 mm (2″) Bugle Head Type S** **57 mm (2-1/4″) Bugle Head** **64 mm (2-1/2″) Bugle Head** **76 mm (3″) Bugle Head** Attaches multiple layers of gypsum panels and other compatible materials to steel framing.	6x50.8(2) 6x57.2(2-1/4) 7x63.5(2-1/2) 8x76.2(3)
	**32 mm (1-1/4″) Bugle Head (Type W)** Attaches 12.7 mm (1/2″) or 15.9 mm (5/8″) single-layer gypsum panels, bases, or resilient channels to wood framing.	6x31.8(1-1/4)
	**11 mm (7/16″) Pan Head** Attaches 25-ga. steel studs to runners.	6x11.1(7/16) 7x11.1(7/16)
	**38 mm (1-1/2″) Bugle Head-Laminating** Temporary attachment of gypsum to gypsum.	10x38.1(1-1/2)
	**41 mm (1-5/8″) Trim Head** **57 mm (2-1/4″) Trim Head** Attaches wood trim to 20 to 25-ga. steel framing.	6x41.3(1-5/8) 6x57.2(2-1/4)

Double Thread Screw Applications

	Application	Screw Size and Length (no. x mm (Inches))
	**Bugle Head** Attaches gypsum board to 20 to 25-ga. steel framing.	6x25 (1) 6x29 (1-1/8) 6x32 (1-1/4) 6x41 (1-5/8) 6x51 (2) 6x57 (2-1/4) 7x64 (2-1/2) 8x76 (3)

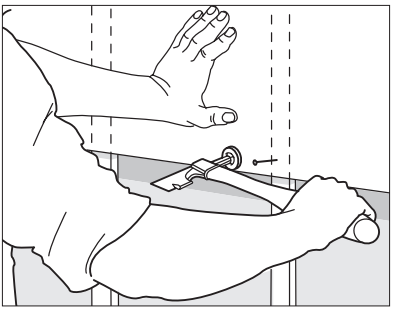
Drill Tip Screw Applications

	Application	Screw Size and Length (no. x mm (Inches))
	**Bugle Head** Attaches single-layer gypsum board to steel framing up to 14-ga.	6x25 (1) 6x29 (1-1/8) 6x32 (1-1/4)
	**Bugle-Head** Attaches multilayer gypsum board to steel framing up to 14-ga.	6x41 (1-5/8) 6x48 (1-7/8) 8x54 (2-1/8) 8x67 (2-5/5/8) 8x76 (3)
	**Pan Head** Attaches stud to runner up to 14-ga.	7x11 (7/16) 8x16 (5/8)
	**Hex Washer Head** Attaches steel to steel up to 14-ga.	8x13 (1/2) 8x16 (5/8) 8x19 (3/4) 8x25 (1)
	**Modified Truss Head** Attaches metal lath to steel framing up to 14-ga.	8x13 (1/2) 8x19 (3/4) 8x25 (1) 8x32 (1-1/4)

Gypsum Board Nails

The design of nails has vastly improved since the relationship of wood shrinkage to nail popping was discovered. Nails have been developed to concentrate maximum holding power over the shortest possible length—notably the annular ring type nail which has about 20% greater holding power than a smooth-shank nail of the same length and shank diameter. However, under lengthy, extreme drying conditions, such as a cold dry winter or in arid climates, resultant wood shrinkage may cause fastener pops even with the shorter annular ring nail.

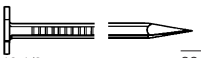
As with screws, specification of the proper nail for each application is extremely important, particularly for fire-rated construction where nails of the specified length and diameter only will provide proper



Hand pressure is applied to panel as nail is driven.

performance. When wood-frame gypsum panel systems are subjected to fire, nails on surface attain temperatures that tend to char the wood, thereby reducing their holding power. Nails used in gypsum construction should comply with performance standards of ASTM C514. Nails are not available from CGC.

Selector Guide for Gypsum Board Nails[1]

			Total thickness of surfacing materials[3]											
	Fastener length		mm	6.4	9.5	12.7	15.9	19.1	22.2	25.4	31.8	34.9	Approx Usage	
Fastener description[2]	**mm**	**in.**	**in.**	**1/4**	**3/8**	**1/2**	**5/8**	**3/4**	**7/8**	**1**	**1-1/4**	**1-3/8**	**kg/100m²**	**lb/1,000 ft²**
														
Annular Ring Drywall Nail 12-1/2 ga. 6.35 mm (1/4″) diam. head, med. diamond point	32	1-1/4		X	X	X							2.20	4.50
	35	1-3/8					X						2.44	5.00
	38	1-1/2						X					2.56	5.25
	41	1-5/8							X				2.81	5.75
Same as above except 7.54 mm (19/64″) diam. head	32	1-1/4		X	X	X							2.20	4.50
	35	1-3/8					X						2.44	5.00
	38	1-1/2						X					2.56	5.25
	41	1-5/8							X				2.81	5.75
	45	1-3/4								X			2.93	6.00
	51	2									X		3.42	7.00
														
12-1/2 ga. 7.54 mm (19/64″) diam. head	32	1-1/4		X	X	X							2.20	4.50
	35	1-3/8					X						2.44	5.00
	38	1-1/2						X					2.56	5.25
	41	1-5/8							X				2.81	5.75
Same as above except 6.35 mm (1/4″) diam. head														
14 ga.	35 (4d)	1-3/8					X						1.71	3.50
13-1/2 ga.	41 (5d)	1-5/8						X					2.20	4.50
13 ga.	48 (6d)	1-7/8								X			2.81	5.75
13-1/2 ga.	54 (7d)	2-1/8										X	3.66	7.50

(1) For wood framing 400 mm (16″) o.c., nails 200 mm (8″) o.c. for walls, 175 mm (7″) o.c. for ceilings. (2) All nails treated to prevent rust with joint compounds or veneer plaster finishes. Fire-rated assemblies generally require greater nail penetration; therefore, for fire-rated assemblies, use exact nail length and diameter specified for rated assembly (see Fire Test Report). (3) In laminated double-layer construction, base layer is attached in same manner as single layer.

Adhesives

Drywall adhesives make an important contribution to gypsum panel attachment where the finest room interiors are desired. Their use greatly reduces the nail or screw fastening otherwise required, thus saving labor on spotting and sanding, as well as minimizing nail pops and other fastener imperfections.

Joint Compounds

CGC's line of Joint Compound includes both ready-mixed and powder products in drying and setting (hardening) types. In addition to conventional joint finishing and fastener spotting, some of these products are designed for repairing cracks, patching, back-blocking, texturing and for laminating gypsum panels in double-layer systems. Products comply with ASTM C475.

Advantages

Low Cost High-quality products reduce preparation time, save application labor and prevent expensive callbacks.

Versatility Job-tested compounds are available in specialized types to meet finishing requirements.

Safety Safe to handle and use; Refer to MSDS sheets for details.

Use of CGC joint compounds brings the important added advantage of dealing with one manufacturer who is responsible for all components of the finished walls and ceilings—formulated in our laboratories, and manufactured in our plants for maximum system performance.

General Limitations

1. CGC joint compounds are not compatible with and should not be intermixed with any other compounds.
2. For interior use only except for the use of setting-type (DURABOND 90) and lightweight setting-type (SHEETROCK 90/PRO-SET) Joint Compounds with SHEETROCK Brand Exterior Gypsum Ceiling Board.
3. Not recommended for laminating except setting-type (DURABOND 90) and lightweight setting-type (SHEETROCK 90/PRO-SET) Compounds and CGC/SYNKO Brand Ready-Mixed Compounds—All Purpose and Taping.
4. Protect bagged and cartoned products against wetting; protect ready-mixed products from freezing and extreme heat.
5. Each compound coat must be dry before the next is applied (except setting-type (DURABOND) and lightweight setting-type (SHEETROCK 90/PRO-SET 90) Compounds); and completed joint treatment must be thoroughly dry before decorating.
6. Use only setting-type (DURABOND) 90 or lightweight setting-type (SHEETROCK 90/PRO-SET 90) with 85-130 min. hardening time, or setting-type (DURABOND 45) or lightweight setting-type (SHEETROCK 45/PRO-SET 30) with 30-80 min. hardening time for treating joints of Water-Resistant Gypsum Panels to be covered with ceramic or plastic tile.
7. With regard to the following products: CGC Lite, CGC X-tra Lite; SYNKO Lite Line-A/P, Taping and Finishing; and SYNKO Classic-A/P, Taping and Finishing— If smoothing by dry sanding, use nothing coarser than 150 grit sandpaper or 220 grit abrasive mesh cloth.

8. For painting and decorating, follow manufacturer's directions for materials used. All surfaces must be thoroughly dry, dust-free and not glossy before decorating. SHEETROCK Brand First Coat should be applied and allowed to dry before decorating.
9. Gypsum panel surface should be skim coated with joint compound to equalize suction before painting in areas where gypsum panel walls and ceilings will be subjected to severe artificial or natural side lighting and be decorated with a gloss paint (egg shell, semi-gloss or gloss).
10. If dry sanding is used to smooth the joint compound, avoid roughening the gypsum panel face paper.
11. Do not use topping compound for taping or as first coat over bead.

Ready-Mixed Drying-Type Joint Compounds

CGC/Synko Joint Compounds are drying-type products which are vastly superior to ordinary ready-mixed compounds and are preferred for consistently high-quality work. These vinyl-based formulations are specially premixed to a creamy, smooth consistency essentially free of crater-causing air bubbles. They offer excellent slip and bond, and easy workability. Available for hand or machine-tool applications.

Limitation: must protect wet joints and container from freezing.

CGC All Purpose Joint Compound – 27 kg

Is a ready mixed joint compound. Used for complete finishing, also for hand-applied simple texturing. Also recommended for laminating and repairing cracks in interior plaster and masonry not subject to moisture. With superior bond characteristics, it is the best all purpose for taping.

CGC All Purpose-Lite Drywall Compound – 23 kg

Is a premixed compound used for embedding CGC Drywall Tape, for filling and finishing gypsum panel joints, corner bead, trim and fasteners. This compound features improved slip, lower shrinkage and provides a superior final coat application. Other uses include: skim coating; repairing interior surfaces such as plaster, gypsum panels and masonry not subject to water.

CGC X-tra Lite Drywall Compound – 18 kg

Offers three exclusive advantages: up to 30% less weight, less shrinkage and exceptional ease of sanding. Ideal for fill and finish coats. Usually needs only two coats over metal. Use for laminating gypsum panels in fire-rated construction, for coating interior concrete ceilings and columns above grade, and for patching cracks in plaster. Also used for applying textures.

Machine Mud™ Drywall Compound – 20 kg

Machine Mud is a ready mixed joint compound for taping. Designed primarily for mechanical tool users, Machine Mud is also intended for hand application. Machine Mud compound is formulated to be crater free, requiring fewer passes to achieve a smooth surface. As a lightweight product it is very easy to sand and has minimal shrinkage.

Formula 1™ Premium Drywall Compound – 23 kg

Formula 1 is a ready-mixed joint compound that provides superior resistance to craters and "fish eyes"; excellent slip; easy application with minimal effort; superior bond for taping; and an exceptionally smooth finish. This lightweight formulation offers low shrinkage, less cracking and easy sanding.

Synko Brand Ready-Mix Drying-Type Compounds

Synko Lite

A lightweight drying type compound available as an all purpose or a two-compound system utilizing a taping and a finishing product.

Synko® Lite Line All Purpose

– Formulated for filling, finishing joints trims and surfaces of gypsum board.
– Easy sanding.
– Minimum shrinkage.
– Superior spreadability.

Synko Lite Joint

– Formulated for embedding tape and paper faced metal trim.
– Recommended for use as a skim coat material.
– Good open time.

Synko Lite Finish

– Formulated for loading and finishing joints trims and surfaces of gypsum board.
– Easy workability.
– Smooth.

Synko Classic

A lightweight drying type compound that offers superior working properties (spreadability) and reduced shrinkage.

Synko Classic All Purpose

– Lighter weight.
– Greater stability.
– Reduced shrinkage.

Synko Classic Taping

– Formulated for a strong tape bond and first fill coat.
– Ideal for laminating.

Synko Classic Finish

– Formulated for superior sandability and a smooth tight finish.
– Very low shrinkage.
– Great stability and more working time.

Powder Setting-Type Joint Compounds

These setting-type powder products were developed to provide faster finishing of drywall interiors, even under slow drying conditions. Rapid chemical hardening and low shrinkage permit same-day finishing and usually next-day decoration. Features exceptional bond; virtually unaffected by humidity extremes. Ideal for laminating double-layer systems, particularly fire-rated assemblies, and for adhering gypsum panels to above-grade concrete surfaces. May be used for surface texturing and for filling, smoothing and finishing interior above-grade concrete. Also used to treat joints in exterior gypsum ceiling board; as prefill material for SHEETROCK Brand Gypsum Panels; for treating joints of SHEETROCK Brand Gypsum Panels, Water-Resistant; treating fastener heads in areas to receive ceramic or plastic tile.

SHEETROCK 20/45/90, SYNKO PRO-SET 30/90, weighs less than conventional setting-type compounds for easier handling, faster application and improved productivity on the job. Provides sanding ease similar to a ready-mixed, all purpose joint compound. Offers varied setting times of 20 to 30 min. (SHEETROCK 20); 30 to 80 min. (SHEETROCK 45, PRO-SET 30, FAST-SET); 85 to 130 min. (SHEETROCK 90, PRO-SET 90).

SYNKO FAST-SET is a chemically "setting" drywall filler which may be used to fill deep voids in almost any interior wall surface or replace "drying" drywall filler where speed of construction is essential and heat is limited. Stock must be rotated at least every 60 days. FAST-SET will set up in 45 to 90 minutes.

DURABOND Provides the strongest joint bond of all setting-type compounds. Available in two setting times to meet varying job requirements: 30 to 80 min. (DURABOND 45); 85 to 130 min. (DURABOND 90). Ideal for embedding tape and fill beads in veneer plaster finish systems when rapid drying conditions exist.

Setting-Type Joint Compound Limitations

1. Not to be applied over moist surfaces or surfaces likely to become moist, on below-grade surfaces, or on other surfaces subject to moisture exposure, pitting or popping.
2. DURABOND 45/90 is difficult to sand after drying and must be smoothed before complete hardening.
3. Before using over new interior concrete surfaces, concrete should age 60 days or more.

Joint Compound Selection

Choosing the right joint compound for a specific job requires an understanding of a number of factors: job conditions, shop practices, applicators' preferences, types of available joint systems, characteristics of products considered and recommended product combinations.

Joint compound products are either 'All-Purpose'-will perform all functions or named according to function, such as taping, finishing and all-purpose. All-Purpose is generally a compromise of taping and finishing and may be used as a simple hand-applied texturing material. Lightweight All Purpose Joint Compound is also an all-purpose compound, but is lighter, shrinks less and sands easier. Taping typically performs as the highest shrinking, strongest bonding, hardest sanding of the three compounds, and is used for embedding tape. Finishing usually is the lowest shrinking, easiest applying and sanding of the compounds for use in second and third coats; may occasionally be designed for simple hand-applied texturing. Taping and finishing are usually designed as companion products to give the highest quality workmanship.

Types of Joint Compounds

All Purpose Ready-Mixed Compounds Good performance in all joint finishing steps. Open-and-use convenience; save time and mistakes in mixing, leading to minimum waste. Require minimal water supply at the job. Ready-Mixed Compounds have the best working qualities of all compounds—excellent performance plus factory-controlled batch consistency.

Two-Compound Systems Formulated for superior performance in each joint finishing step. Separate taping compounds develop the greatest bond strength and crack resistance. Separate topping compounds have the best sanding characteristics, lower shrinkage and smoothest finishing.

These compounds do require heated storage. Should they freeze, they can be slowly thawed at room temperature, mixed to an even viscosity and used without damaging effect. However, repeated freeze/thaw cycles cause remixing to become more difficult.

Powder Compounds Have the special advantage of being storable (dry) at any temperature. If they are stored in a cold warehouse, however, they should be moved to a warm mixing room the day before they are to be mixed. Best results require strict adherence to proportioning of powder and water.

Interior Texture Finishes

Texture finishes from CGC offer a wide variety of possible texture patterns to provide distinctive interior styling. Fast, easy application; quick drying. Hide minor surface blemishes to reduce surface preparation needed. Save labor time to preserve job profits. All products are non-asbestos containing.

Powder Texture Products

For both commercial and residential buildings, CGC/Synko Texture Finishes complement or accent elements in your interior design scheme. They are economical too. They often cost less to apply than

paint because they go on more quickly and also hide minor surface blemishes to reduce surface preparation time. These texture finishes are designed for interior use only, and all are asbestos-free.

Texture Finishes have been tested for low Surface Burning Characteristics when applied to minimum thickness of 3 mm (1/8″) on gypsum board. This is important in meeting code requirements for fire-safety in institutional, apartment and public buildings.

The texture finishes are equally effective for new work or for redecorating. They may be applied to a variety of surfaces such as gypsum board, plaster, concrete, and metal. Proper preparation of surfaces to receive texture finish is important, since it has been found that most failures are due to neglected or inadequately prepared surfaces. Special attention should be directed to eliminating surface plane differences, particularly in areas containing large windows or openings admitting natural light.

Sheetrock Texture Finish – Medium or Coarse

Formulated with polystyrene aggregate to provide an attractive, simulated sand-finish texture for ceilings. Bonds to new or old concrete, gypsum panel, plasters and primed metal. Levels minor surface irregularities, masks surface defects, and has superior crack-resistance for fissure cracking in normal thickness. Dries to a crisp, white finish that may be painted if desired. CGC First Coat Drywall Paint may be added to increase whiteness and hardness. Surface Burning Characteristics: flame spread, 15; smoke developed, 5; fuel contributed, 5.

Synko Span-Tex

A non aggregated texture for spray application. Designed to provide the largest variety of texture application and finishes.

Synko Snow-Tex

An adhesive bound texture designed for spray application to interior. Snow-Tex provides a coarse aggregate finish. Surface Burning Characteristics: flame spread, 5; smoke developed, 0; fuel contributed, 5.

Synko Ruff-Tex Ceiling Texture

Ruff-Tex is a medium aggregated texture designed for spray application. Surface Burning Characteristics: flame spread, 0; smoke developed, 5; fuel contributed, 10.

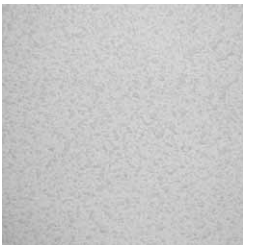
Ready-Mixed Texture Products

READY-TEX™ Wall and Ceiling Spray Texture is a vinyl formulation for texturing interior, above-grade surfaces. Ideal where moderate to bold texture patterns are desired. Designed for spray application over gypsum panel, concrete, and most other interior wall and ceiling surfaces. Formulated to create unique texture patterns such as spatter, spatter/knockdown, and orange peel designs. Dries to a white surface but should be overpainted when dry. Not washable unpainted.

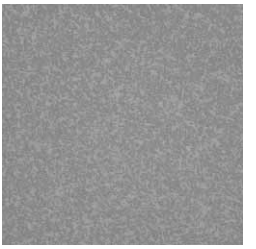
SYNKO SPAN-LITE is a lightweight premixed spray texture for texturing interior above-grade surfaces. Can be applied to gypsum board, concrete or brick (must be primed). Applied SPAN-LITE will produce a spatter type finish.

Texture Finishes

Fine Aggregated



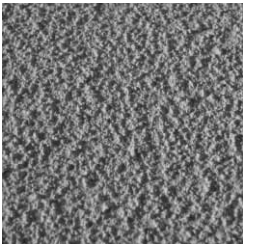
Swirl



Spatter

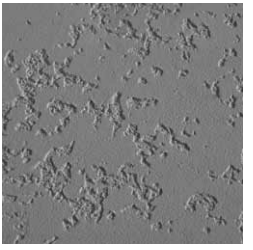
Medium Aggregated

Orange Peel

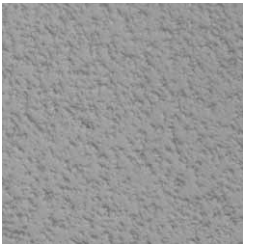


Spatter / Knockdown

Coarse Aggregated



Crowsfoot



Stipple

CGC Textures and Finishes Products

Finish/Pattern	CGC Texture Product(s)	Application Method	Coverage	Finish Coat of Paint	Level
Coarse Aggregated	Sheetrock Texture Coarse	S	1.5-2 m²/kg (8-10 ft²/lb)	Not Required	3
	Snow Texture	S	1.8-2.5 m²/kg (9-12 ft²/lb)	Not Required	3
Medium Aggregated	Sheetrock Texture Medium	S	1.5-2 m²/kg (8-10 ft²/lb)	Not Required	3
	Ruff Tex	S	1.8-3.1 m²/kg (9-15 ft²/lb)	Not Required	3
Fine Aggregated	Covercoat	T	0.6 m²/kg (2.7 ft²/lb)	Not Required	4
	Covercoat	S	0.9 m²/kg (4.5 ft²/lb)	Not Required	4
Crows Foot	Ready Tex	S then B	1-2.4 m²/kg (5-11.7 ft²/lb)	Topcoat Required	4
	Span Tex	S then B	2.7-3.7 m²/kg (13.6-18.1 ft²/lb)	Topcoat Required	4
Swirl	Ready Tex	S then B	1-2.4 m²/kg (5-11.7 ft²/lb)	Topcoat Required	4
	Span Tex	S then B	2.7-3.7 m²/kg (13.6-18.1 ft²/lb)	Topcoat Required	4
Stipple	Span Tex	S then B	2.7-3.7 m²/kg (13.6-18.1 ft²/lb)	Topcoat Required	4
	Ready Tex	S then B	1-2.4 m²/kg (5-11.7 ft²/lb)	Topcoat Required	4
Orange Peel	Span Tex	S	2.7-3.7 m²/kg (13.6-18.1 ft²/lb)	Topcoat Required	4
	Ready Tex	S	1-2.4 m²/kg (5-11.7 ft²/lb)	Topcoat Required	4
	Span Lite	S	2-3.1 m²/kg (10.1-15.1 ft²/lb)	Topcoat Required	4
Spatter	Span Tex	S	0.9-2.3 m²/kg (4.5-11.36 ft²/lb)	Topcoat Required	3
	Ready Tex	S	1-2.4 m²/kg (5-11.7 ft²/lb)	Topcoat Required	3
	Span Lite	S	2-3.1 m²/kg (10.1-15.1 ft²/lb)	Topcoat Required	3
Knockdown	Span Tex	S then T	0.9-2.3 m²/kg (4.5-11.36 ft²/lb)	HeavyTopcoat Req'd	3
	Ready Tex	S then T	1-2.4 m²/kg (5-11.7 ft²/lb)	Topcoat Required	3
	Span Lite	S then T	2-3.1 m²/kg (10.1-15.1 ft²/lb)	Topcoat Required	3

Primers and Paints

CGC First Coat

CGC First Coat Decorating problems such as "joint banding" or "photographing" are usually caused by differences between the porosities and surface textures of the gypsum board face paper or concrete on one hand, and the finished joint compound on the other. CGC First Coat is a flat latex basecoat paint-type product especially formulated to provide a superior first (prime) coat over interior gypsum board, wood and concrete surfaces.

In contrast to a sealer, CGC First Coat does not form a film that seals the substrate surface. Instead, it minimizes porosity differences by providing a base that equalizes the absorption rates of the drywall face paper and the finished joint compound when painted. CGC First Coat also provides the proper type and amount of pigments and fillers, lacking from conventional primers and sealers, that minimize surface texture variations between the gypsum board face paper and the finished joint compound.

CGC First Coat is designed for fast, low-cost application. Applies with brush, roller or airless or conventional sprayer. Dries in less than 30 minutes under 22° C (72° F)/50% R.H. conditions. White finish is ready for decoration in an hour. Not intended as a final coating—it should be overpainted when dry. The product comes ready-mixed in 18.9L (5-gal.) pails.

SHEETROCK Brand Primer—Surfacer

SHEETROCK® Brand Primer–Surfacer, TUFF-HIDE

Description

SHEETROCK® Brand Primer-Surfacer, TUFF-HIDE is a dual-purpose vinyl acrylic latex-based coating designed especially for interior application over new drywall. In a single spray application it provides the same results achieved using a typical two-step process of skim coating surfaces with joint compound followed by a coat of primer. In a GA-214/ASTM C-840 Level 5 gypsum board finish, SHEETROCK Brand Primer-Surfacer, TUFF-HIDE is used in lieu of a skim coat of joint compound and paint primer coat to provide the highest quality drywall finish.

In ceiling applications where a flat white finish is desired, SHEETROCK Brand Primer-Surfacer, TUFF-HIDE can be left unpainted providing an ideal final finish.

Paint Products

TEXTURE UNDERCOATS

SYNKO Roll-On

18.9L

– For new drywall surfaces.
– Dries to flat white finish.
– Hand application with medium to long nap roller.

SYNKO Quick Dry

18.9L

A superior quality, fast drying undercoat specifically designed for spray application to new drywall prior to texture. High solids for superior hide.

SYNKO Pro Spray-On

18.9L

Is an undercoat primer designed for easy spray application to new drywall prior to texture. Provides excellent wet and dry hide.

PRIMER/SEALER

SYNKO T.I.P.S.

18.9L

T.I.P.S. is applied as a primer sealer for new drywall surfaces and as a texture paint. Needs only one coat on new drywall prior to texturing.

SURFACE EQUALIZER

SYNKO Pre-Coat

18L

Pre-Coat is a high performance base coat for superior results where gloss or semi-gloss paints will be applied or where critical lighting conditions occur.

CEILING PAINTS

TEXTURE FRESH

18.9L, 3.78L

Texture Fresh is specially designed to make old, stained, textured ceilings and ceiling tiles look new again. It may be rolled or sprayed. Use mineral spirits to clean up.

Interior Patch and Repair Products

Finished interior walls are subject to abuse and damage from time to time. CGC has developed a line of repair products to deal with a variety of holes, cracks, dents and abrasions. Many of these products may be found in retail hardware and home center stores, in handy convenient sizes.

SHEETROCK 90 Easy sand repair compound. A setting-type compound, when mixed with water, sets in approximately 90 minutes. Dries to a durable sandable finish.

SHEETROCK 20 Easy sand repair compound. A setting-type compound, when mixed with water, sets in approximately 20 minutes. Dries to a durable sandable finish.

DURABOND 90 Repair compound. A setting-type compound, when mixed with water, sets in approximately 90 minutes. Dries to a hard finish. Not sandable.

SHEETROCK Brand Drywall Repair Clips Metal clips that provide for ready attachment of a drywall patch to an existing wall. Use with replacement drywall to repair larger holes.

Concrete Finishing Compounds

COVER COAT Compound A vinyl-base product, formulated for filling and smoothing monolithic concrete ceilings, walls and columns located above grade—no extra bonding agent needed. Sand can be added. Easily applied with drywall tools in two or more coats. Dries to a fine white surface usually making further decoration unnecessary. Not washable unpainted. Also can be used for embedding tape, for first coat over metal bead and trim, and for skim coating over gypsum panels.

Limitation: Not to be applied over moist surfaces or surfaces likely to become moist (from condensation or other source), on ceiling areas

below grade, on surfaces that project outside the building, or any area that might be subject to moisture, freezing, efflorescence, pitting or popping.

Synko Concrete Fill
A quick setting fiberglass plaster compound designed to fill deep voids or cracks in interior masonry walls and ceilings.

– Does not require bonding agents before application.
– Recommended for filling and levelling cracks between pre-cast concrete panels used for ceilings and walls.

Synko Concrete Seal
Designed to be trowelled over sand and dry interior concrete with need for bonding agents. Concrete seal level and seals concrete prior to the application of Synko texture spray.

– Excellent workability.
– Light weight.

CGC Durabond and Sheetrock Setting-Type Joint Compounds These setting-type compounds are ideally suited to fill offsets and voids left in concrete. They produce a hard finish in various shades of white. Overpainting may be required.

Where deep fills are required, CGC Durabond and CGC Sheetrock Setting-Type joint Compounds are especially recommended for the first coat, then followed by Cover Coat Compound. This practice minimizes check cracking.

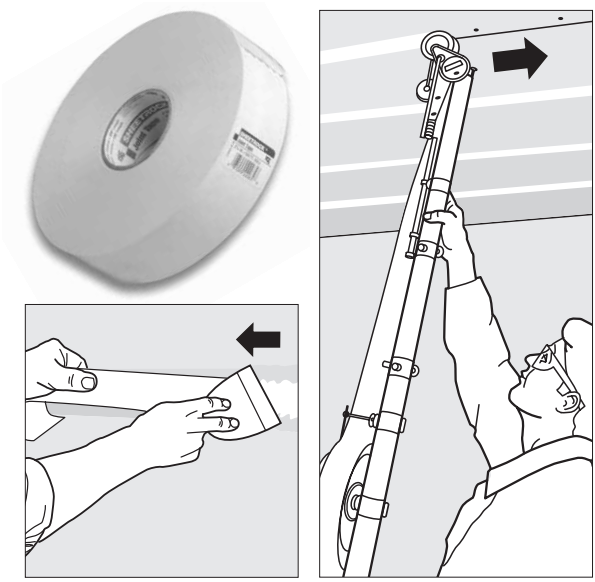
Limitations: same as for Cover Coat Compound.

Reinforcing Tapes

From the originator of modern joint finishing, CGC reinforcing tapes add strength and crack resistance for smooth concealment at flat joints and inside corners. Two products—both quickly and easily applied—are available for specialized uses: paper tape for treatment with joint compounds; glass-fiber tape for veneer plaster finishes.

CGC/Synko Brand Joint Tape A special high-strength fiber paper tape for use with CGC joint compounds in reinforcing joints and corners in gypsum drywall and veneer plaster finish interiors. Exceptional wet and dry strength; resists stretching, wrinkling and other distortions; lies flat and resists tearing under tools. The wafer-thin tape is lightly sanded for increased bond and lies flat for easy concealment on next coat. Precision-processed with positive center creasing, which simplifies application in corners; uniform winding provides accurate, trouble-free attachment to angles and to flat joints.

Preferred for its consistent high performance in gypsum drywall finishing, CGC/Synko Brand Joint Tape with Sheetrock Brand Setting-Type Joint Compounds is also used with veneer plaster finish systems. CGC/Synko Brand Joint Tape provides added strength and crack-resistance in drywall joint treatment; it is 52 mm (2-1/16″) wide in 18.3 m (60′), 76.2 m (250′) and 152.4 m (500′) rolls. Approx. coverage: 121 m/100 m^2 (370 ft/1000 ft^2) gypsum panels.



CGC/Synko Brand Joint Tape is designed for both embedding by hand (below) and application with mechanical taping tool (right). Joint is covered with thin layer of compound before taping.

A joint treatment system (reinforcing tape and joint compound) must provide joints as strong as the gypsum board itself. Otherwise, normal structural movement in a wall or ceiling assembly can result in the development of cracks over the finished joint.

Repeated joint strength tests conducted at the CGC Research Center have shown that joints taped and finished with conventional fiberglass leno-weave mesh tape and conventional joint compounds are more prone to cracking than joints finished with paper tape and conventional joint compounds. This is because fiberglass mesh tapes tend to stretch under load, even after being covered with joint compounds.

Permanent repair of these cracks is difficult. Accordingly, CGC does not recommend using conventional fiberglass leno-weave mesh tape with conventional ready-mixed, powder or chemically setting compounds for general drywall joint finishing.

CGC Fiberglass Drywall Tape Made with a unique cross-fiber construction to provide greater drywall joint strength than conventional fiberglass leno-weave mesh tapes. This self-adhesive tape goes on quickly, eliminating the bedding coat. Smooth, finished joints are accomplished in two coats by using CGC Sheetrock or CGC Durabond setting-type joint compound for at least the first application. The setting-type joint compound also provides the added bond to provide desired joint strength. Second Sheetrock Brand Joint Compound application can be either setting-type or drying-type (ready-mixed or powder) joint compound. Tape also is ideal for patching small holes and cracks.

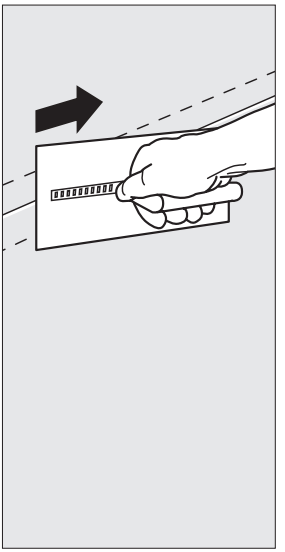
Imperial Brand Tape A strong, glass-fiber tape used in wood-frame construction to conceal and reinforce joints and interior angles of Grand Prix Brand Veneer Plaster Base prior to veneer plaster finishing with Imperial Brand Basecoat, Imperial Brand Finish Plaster, Diamond

Brand Veneer Basecoat and DIAMOND Brand Interior Finish Plaster. High-tensile strength glass fibers are woven into an open mesh, coated with binder and slit to roll width.

The open weave of IMPERIAL Brand Tape provides excellent reinforcing and keying of plaster to resist cracking. The glass fibers lay flat and minimize stretching for wrinkle-free attachment without springback or distortion. Spirally woven (leno) long strands and the binder coating reduce edge raveling and fraying, and keep loose threads from defacing finished surfaces. Tape flexes readily to permit fast application to flat joints and corners. Available in:

Type P with pressure-sensitive adhesive backing. Selected for quick, self-stick hand application; saves installation time and fastener cost.

Availability: Type P in 91 m (300-ft.)-rolls 51 mm (2″) and 64 mm (2-1/2″) wide; 12 rolls per ctn. Approx. coverage: 121 m/100 m^2 (370 ft/1000 ft^2) gypsum base.



Glass-fiber IMPERIAL Brand Tape is quickly applied—self-stick Type P by light hand pressure and bonding with finishing knife or trowel (right). Use of Type P Tape cuts taping time up to 50%, simplifies embedding and saves cost of staples.

Veneer Plaster Finishes

Veneer plaster finishes offer the opportunity to trim days from interior finishing schedules and provide strong, highly abrasion-resistant surfaces. These products are designed for one or two-coat work over gypsum bases or directly to concrete block or properly prepared monolithic concrete. Formulated for hand or machine application (IMPERIAL Brand Finish and DIAMOND Brand Interior Finish hand only), they provide a thin, lightweight veneer that sets rapidly.

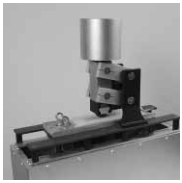
Conventional plaster is the best system to attain a uniform, monolithic, blemish-free, smooth surface with excellent wear resistance. By contrast, veneer plaster systems have large-size gypsum panels to improve speed of

installation, while providing more monolithic, harder, abuse-resistant surfaces than are achievable with drywall. Plaster thickness is reduced from the standard 12.7 mm (1/2″) associated with conventional plaster to a mere 1.6 mm (1/16″) to 3 mm (1/8″) using high-strength gypsum in the product formulations. While RED TOP Keenes Cement-lime-sand provides the most universal texture finish in two-coat application, IMPERIAL Brand Finish Plaster and DIAMOND Brand Interior Finish Plaster provide better surface hardness abrasion resistance and wearability. Ready for final finish in as little as 48 hours if completely dry. (See "Comparing Plaster Systems" in Appendix.)

Advantages

Rugged, Abuse-resistant Surfaces High-strength IMPERIAL Brand Plaster Finishes (20.7 mpa (3,000 psi) compressive strength) provide hard, durable interiors that require minimum maintenance.

Quicker Completion/Faster Occupancy Veneer plaster finishes apply rapidly, set fast, dry quickly to save days in finishing interior walls and ceilings. DIAMOND Brand Interior Finish Plaster can be decorated in 24 hrs. (if completely dry) with breather-type paint or left undecorated if desired.



When abraded 1000 cycles by 11 kg (25-lb.) weighted wire brush in laboratory test, IMPERIAL Brand Veneer Plaster Finish showed virtually no penetration—proof of outstanding abrasion resistance.

Competitive Costs Veneer plaster finishes are easily applied and cover more area per ton than conventional plasters. Joints and interior angles are pre-set with the same veneer plaster finish that goes on the walls and ceilings.

Easily Decorated Veneer plasters are readily finished in smooth-trowel, float or texture surfaces. The hard, smooth surface is decorated easily and economically with paint, fabric, wallpaper or texture.

Versatile A wide choice of assemblies is available to meet design requirements: Fire and sound-rated systems for wood or steel framing, hard and abuse-resistant surfaces for high-traffic areas, and electrically heated ceilings.

Products Available

IMPERIAL Brand Basecoat Plaster

IMPERIAL Brand Basecoat Plaster For use as a basecoat in two-coat veneer application finished with proper lime or gypsum finishes. Can be applied to either GRAND PRIX Brand Veneer Plaster Base, directly to concrete block, or over USG Plaster Bonder on monolithic concrete. Formulated as the basecoat for high-strength IMPERIAL Brand Finish Plaster, gauged lime putty, DIAMOND Brand Interior Finish Plaster, STRUCTO-GAUGE—lime—smooth trowel, or Keenes—lime—sand float finishes. Available in hand and machine-application formulations. Complies with ASTM C587. Available in 22.5 kg (50-lb.) bags.

IMPERIAL Brand Finish Plaster

IMPERIAL Brand Finish Plaster For single-coat application composed of scratch coat and immediate doubling back directly over special GRAND PRIX Brand Veneer Plaster Base, glass-fiber tape or CGC Joint Tape or setting-type joint compound (DURABOND 90 or SHEETROCK 90/PRO-SET 90). Also used over IMPERIAL Brand Basecoat Plaster in a two-coat system. Available for hand application—provides a smooth-trowel or float or spray-texture finish ready for decoration. Complies with ASTM C587. Available in 22.5 kg (50-lb.) bags.

Coverage—IMPERIAL Brand Basecoat and Finishes

	m^2/ton (metric)(1)		$ft.^2$/ton	
Product	**Gypsum base**	**Masonry**	**Gypsum base**	**Masonry**
IMPERIAL Brand Basecoat	335-435	275-370	3250-4250	2700-3600
IMPERIAL Brand (1-coat) Finish	360-410	not recommended	3500-4000	not recommended
IMPERIAL Brand (2-coat) Finish	330-370	330-370	3200-3600	3200-3600

(1) Coverage rounded to nearest 5m^2 per metric ton.

DIAMOND Brand Veneer Basecoat Plaster

DIAMOND Brand Veneer Basecoat Plaster Provides quality walls and ceilings for residential construction where superior strength of IMPERIAL Brand Basecoat Plaster is not essential. Offers superior workability, ease and speed of application. Formulated to receive a variety of finishes. Apply to GRAND PRIX Brand Veneer Plaster Base, concrete block or monolithic concrete. Complies with ASTM C587. Available in 22.5 kg (50-lb.) bags.

Coverage—DIAMOND Brand Basecoat

	m^2/ton (metric)(1)		$ft.^2$/ton	
Product	Gypsum base	Masonry	Gypsum base	Masonry
	410-510	360-460	4000-5000	3500-4500

DIAMOND Brand Interior Finish Plaster

DIAMOND Brand Interior Finish Plaster A white finish formulated for hand application directly to GRAND PRIX Brand Veneer Plaster Base or over CGC Plaster Bonder on monolithic concrete. Also suitable in a two-coat system over IMPERIAL Brand or DIAMOND Brand Basecoat or a sanded gypsum basecoat. Applied to a nom. 1.6 mm (1/16″) thickness, this finish is unaggregated for a smooth or skip-trowel finish; may be job aggregated with up to an equal part by weight of clean, fine silica sand for Spanish, swirl, float or other textures. Not recommended for use over portland cement basecoat or masonry surfaces. Complies with ASTM C587. Available in 22.5 kg (50-lb.) bags.

DIAMOND Brand Interior Finish Plaster should be applied only to GRAND PRIX Brand Veneer Plaster Base having blue face paper. Faded base must be treated with USG Accelerator—Alum Catalyst or USG Plaster Bonder before finish is applied to prevent possible bond failure. See page 209 for specific application instructions.

DIAMOND Brand Interior Finish Plaster is also suitable for use with electric cable ceilings. Allows higher operating temperatures than with other products, provides more heat transmission and greater resistance to heat deterioration. Finish is job-sanded and hand-applied 4.8 mm (3/16″) thick to cover cable. A finish coat of the same material is applied 1.6 mm (1/16″) to 2.4 mm (3/32″) thick to bring the total plaster thickness to 6.4 mm (1/4″). Applied over GRAND PRIX Brand Base attached to wood joists, to metal furring channel or suspended metal grillage, or over USG Plaster Bonder directly to monolithic concrete ceilings (8 mm (5/16″) fill coat plus finish coat for 9.5 mm (3/8″) total thickness.)

Coverage—DIAMOND Brand Interior Finish Plaster

Conventional walls and ceilings

	Neat		Sand float finish sanded 1:2[1] (Sand:DIF)[1]		Heavy texture finish sanded 1:1[1] (Sand:DIF)[1]	
Surface applied to	**m^2/ton[2]**	**$ft.^2$/ton**	**m^2/ton[2]**	**$ft.^2$/ton**	**m^2/ton[2]**	**$ft.^2$/ton**
GRAND PRIX Brand Veneer Plaster Base	610	6000	475	4660	355	3500
IMPERIAL Brand or DIAMOND Brand Basecoat	560	5500	440	4330	330	3250
Sanded RED TOP Basecoat	510	5000	410	4000	305	3000
Monolithic concrete[3][4]	560	5500	440	4330	330	3250
Veneer basecoat over monolithic concrete[3]	560	5500	440	4330	330	3250

Electric cable heat ceilings

	fill coat[5] sanded 1:1[1]		1/16″ finish coat sanded 1:4[1]		1/16″ finish coat sanded 1:1[1]	
Surface applied to	**m^2/ton[2]**	**$ft.^2$/ton**	**m^2/ton[2]**	**$ft.^2$/ton**	**m^2/ton[2]**	**$ft.^2$/ton**
GRAND PRIX Brand Veneer Plaster Base	235	2300	510	5000	330	3250
Monolithic concrete[3]	84	900	560	5500	418	4500

(1) Coverage based on one ton of aggregated mixture (combined weight of sand and DIAMOND Brand Interior Finish Plaster). (2) Coverage rounded to nearest km^2 per metric ton. (3) USG Plaster Bonder required. (4) Must be job sanded, minimum 1/2:1, sand to plaster. (5) Fill coat over gypsum base is 4.8 mm (3/16″) thick—over monolithic concrete is 8 mm (5/16″).