Nordstrom Contracting
Consulting Corp
36 Theills Mt Ivy Rd
Pomona, NY 10970

LETTER OF TRANSMITTAL

Project 561A4-15-102
Lyons VA - Correct FCA
Deficiencies Bld 1

11/04/2022

To: Mr. Gary Boehner

General Engineer
Montrose Campus
151 Knollcroft Rd
Lyons, NJ 07939

11- Division 09- 092900

Submittal # _____

We are sending you ☐ Herewith ☐ Delivered by Hand ☐ Under Separate Cover ☒ Via **ELECTRONIC**

☐ Plans ☐ Prints ☐ Shop Dwgs ☐ Samples ☐ Specifications ☒ Other _____

Copies	Item	# Pages	Description
			Division 092900- Gypsum Board
1	1		National Gypsum- Type X- 5/8" sheetrock
1	2		USG- "Sheetrock" - Type X- 5/8" Sheetrock
1	3		National Gypsum- Joint Tape
1	4		National Gypsum- Lite-Blue Joint Compound
1	5		National Gypsum- Ultra Lite- All Purpose Joint Compound
1	6		National Gypsum- Moisture Resistant (Purple) Sheetrock- 5/8"
1	7		
1	8		
1	9		
1	10		

The Above Listed Items are transmitted as indicted below:

Return By Date: SEE BAR CHART

_____Approved

_____Approved with corrections as noted on submittal data and/or attached sheets(s)

Signature: _____

Title: _____

Date: _____

Remarks: _____

GOLD BOND® BRAND FIRE-SHIELD® GYPSUM BOARD

MANUFACTURER

National Gypsum Company
2001 Rexford Road
Charlotte, NC 28211
(704) 365-7300

Technical Information:
1-800-NATIONAL
(1-800-628-4662)

Fax: 1-800-FAX NGC1
(1-800-329-6421)

Internet Home Page:
nationalgypsum.com
09 29 00/NGC BuyLine: 1100

DESCRIPTION

Gold Bond® BRAND Fire-Shield® Gypsum Board panels consist of a fire-resistant gypsum core encased in heavy natural-finish, 100% recycled paper on the face and back sides. The face paper is folded around the long edges to reinforce and protect the core, and the ends are square-cut and finished smooth. For speed of installation, GridMarX® guide marks are printed on the paper surface.

Long edges of the panels are tapered or square. Tapered edges allow joints to be reinforced with ProForm® BRAND Joint Tape and concealed with ProForm® BRAND Ready Mix or ProForm® BRAND Quick Set Setting Joint Compounds.

Fire-Shield Gypsum Board features a Type X core to provide additional fire resistance ratings when used in laboratory tested systems.

Gold Bond® BRAND Fire-Shield® C Gypsum Board panels have a specially formulated Type X core to achieve superior performance when used in specific fire-rated Type C assemblies.

BASIC USES

1/2" Fire-Shield C - For single- or multi-layer drywall construction for fire tested assemblies. Also used as a roofing substrate.

5/8" Fire-Shield - For single- or multi-layer drywall construction. The greater thickness provides increased resistance to fire and reduced sound transmission.

5/8" Fire-Shield C - For single- or multi-layer drywall construction. The specially formulated Type X core achieves superior performance when used in specific assemblies.

ADVANTAGES

- Lightweight, cost-efficient material that readily accepts a wide range of decorative finishes.
- Gypsum Board is easily cut for quick installation, permitting painting or other decoration and the installation of metal or wood trim almost immediately.
- The gypsum core will not support combustion or transmit temperatures greatly in excess of 212°F (100°C) until completely calcined, a slow process.
- Expansion and contraction under normal atmospheric changes is negligible.

GREENGUARD CERTIFIED

Gold Bond Fire-Shield Gypsum Board has achieved GREENGUARD Gold Certification.

LIMITATIONS

- Exposure to excessive or continuous moisture and extreme temperatures should be avoided. Gypsum Board is not recommended where it will be exposed to temperatures exceeding 125°F (52°C) for extended periods of time
- To prevent objectionable sag in gypsum paneled ceilings, the weight of overlaid unsupported insulation should not exceed the following recommendations:

PSF (lbs./sq.ft.)	Type	Frame Spacing
1.3 (6.3 kg/M²)	1/2" Fire-Shield C	24" o.c.
2.2 (10.7 kg/M²)	1/2" Fire-Shield C	16" o.c.
2.2 (10.7 kg/M²)	5.8" Fire-Shield 5/8" Fire-Shield C	24" o.c.

- Installing Fire-Shield Gypsum Board panels over an insulating blanket, installed continuously across the face of the framing members, is not recommended. Blankets should be recessed and flanges attached to the sides of the studs or joists.
- Fire-Shield Gypsum Board must be stored off the ground and under cover. Sufficient risers must be used to assure support for the entire length of the gypsum board to prevent sagging.
- Fire-Shield Gypsum Board must be kept dry to minimize the potential for mold growth. Adequate care should be taken while transporting, storing, applying and maintaining gypsum board. For additional information, refer to the Gypsum Association publication, *"Guidelines for the Prevention of Mold Growth on Gypsum Board"* (GA-238-03, which is available at www.gypsum.org under the "Download Free Gypsum Association Publications" section.

Job Name _____

Contractor _____ Date _____

Submittal Approvals: (Stamps or Signatures)

COMPOSITION & MATERIALS

Fire-Shield Gypsum Board is a manufactured panel with a Type X gypsum core encased with paper. Fire-Shield core gypsum board also contains various aggregates such as fiberglass to enhance the fire resistive qualities. Fire-Shield Gypsum Board contains no asbestos.

ACCESSORIES

- Fasteners: drywall screws, nails and/or adhesives
- ProForm Fiberglass Mesh Tape
- ProForm Joint Tape
- Cornerbead, casing beads
- ProForm Ready Mix or Pro-Form Quick Set/Quick Set Lite Setting Compound
- E-Z Strip control joints or .093 zinc control joints

TECHNICAL DATA

PHYSICAL PROPERTIES

Thickness, nominal	1/2" Type C (12.7 mm) 5/8" Type X or C (15.9 mm)
Width, nominal*	4' (1219 mm)
Length, standard**	6' through 16' (1829-4877 mm)
Weight, lbs./sq.ft., nominal	1/2" Type C - 1.9 5/8" Type X - 2.2 5/8" Type C - 2.4
Edges	Square or Tapered
Surface Burning Characteristics (per ASTM E 84)	Flame Spread: 15 Smoke Developed: 0

*54" wide Gypsum Board available in 5/8" thickness.
**Special lengths may be available. Contact your local sales representative for more information.

APPLICABLE STANDARDS AND REFERENCES

ASTM C 1396
ASTM C 840
Gypsum Association GA-216
Gypsum Association GA-214
National Gypsum Company, *Gypsum Construction Guide*

FIRE RESISTANT RATINGS

Fire resistance ratings represent the results of tests on assemblies made up of specific materials in a specific configuration. When selecting construction designs to meet certain fire resistance requirements, caution must be used to insure that each component of the assembly is the one specified in the test. Further, precaution should be taken that assembly procedures are in accordance with those of the tested assembly. (For copies of specific tests, call 1-800-NATIONAL.)

UL CORE DESIGNATION

1/2″ Fire-Shield C - FSW C
5/8″ Fire-Shield - FSW
5/8" Fire-Shield C - FSW C

INSTALLATION

RECOMMENDATIONS

Installation of Fire-Shield Gypsum Board should be consistent with the methods described in the standards and references noted.

GRIDMARX®

Fire-Shield Gypsum Board comes standard with GridMarX® guide marks, printed on the paper surface. These guide marks align with standard building dimensions and help to quickly identify fastener lines for stud and joist framing. Using GridMarX, accurate cuts can be made without having to draw lines. The use of GridMarX also provides quick identification and uniform nail/screw patterns.

GridMarX guide marks run the machine direction of the board at five points in 4″ increments. Marks run along the edge in both tapers and at 16″, 24″ and 32″ in the field of the board. The marks cover easily with no bleed-through using standard paint products.

Vertical Application - In a vertical application, GridMarX serve as a **guide mark** to help identify the exact location of framing members behind the gypsum board eliminating the need for field applied vertical lines.

Horizontal Application - In a horizontal application, GridMarX serve as a **reference mark** to help identify the location of framing members behind the gypsum board. (If framing member is located 2″ to the right of the GridMarX at the top edge of the board, it will be located 2″ to the right down the face of the board)

DECORATION

For best painting results, all surfaces, including joint compound, should be clean, dust-free and not glossy. To improve fastener and joint concealment, a coat of a quality primer is recommended to equalize the porosities between surface paper and joint compound.

The selection of a paint to give the specified or desired finished characteristics is the responsibility of the architect or contractor.

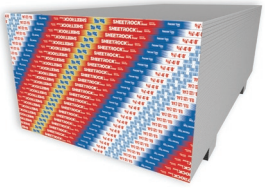
Fire-Shield Gypsum Board that is to have a wallcovering applied to it should be prepared and primed as described for painting.

Gypsum Association GA-214, *Recommended Specification for Levels of Gypsum Board Finish*, should be referred to in order to determine the level of finishing needed to assure a surface properly prepared to accept the desired decoration.

National Gypsum®

Submittal Sheet
09250

Sheetrock® Gypsum Panels



Regular and Firecode® Cores

Quality interior wall and ceiling panels at low cost

- Fire-resistant dry construction
- Quick installation and decoration
- Score and snap easily
- Resist cracking and warping
- Specialized types for all systems

Description

SHEETROCK® brand gypsum panels are factory-fabricated, composed of a fire-resistant gypsum core encased in heavy natural-finish face paper and strong liner 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 are tapered, allowing joints to be reinforced and concealed with a USG joint treatment system.

SHEETROCK gypsum panels are available with three core types for standard construction uses.

Regular core

With a regular core, available in three thicknesses for specific purposes.

1/2″ Panels Recommended for single-layer application in residential construction.
3/8″ Panels Lightweight, applied principally in the double-wall system over wood framing, and in repair and remodeling.
1/4″ Panels Lightweight, low-cost, utility gypsum panels, used as base layer for improving sound control in double-layer steel and wood-stud partitions, and for use over old wall and ceiling surfaces. Also for forming curved surfaces with short radii.

FIRECODE® Core

5/8″ Type X Gypsum Panels Provide additional fire resistance over regular panels.

FIRECODE C Core

1/2″ and 5/8″ Type C Gypsum Panels Specially formulated mineral core provides fire resistance superior to that offered by FIRECODE Core gypsum panels.

Limitations

1. Avoid exposure to sustained temperatures exceeding 125 ˚F (52 ˚C).
2. Avoid exposure to excessive, repetitive or continuous moisture before, during and after installation. Eliminate sources of moisture immediately.
3. Non-loadbearing.
4. Fire-resistance ratings achieved when assembled in accordance with UL designs.

Finishing and Decorating

For high-quality finishing results, USG recommends the following products:

- SHEETROCK® ready-mixed joint compounds
- SHEETROCK® setting-type joint compounds
- SHEETROCK® joint tape
- SHEETROCK® First Coat primer
- SHEETROCK™ paper-faced metal bead and trim
- SHEETROCK® TUFF-HIDE™ primer-surfacer

Painting products and systems should be used which comply with recommendations and requirements in Appendixes of ASTM C840. For priming and decorating with paint, texture or wall covering, follow manufacturer's directions for materials used.

All surfaces, including applied joint compound, must be thoroughly dry, dust-free, and not glossy. Prime with SHEETROCK First Coat primer or with an undiluted, interior latex flat paint with high-solids content. Allow to dry before decorating.

To improve fastener concealment, 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), the gypsum panel

surface should be skim coated with joint compound. This equalizes suction and texture differences between the drywall face paper and the finished joint compound before painting. As an alternative to skim coating, or when a Level 5 finish is required, use SHEETROCK TUFF HIDE™ primer-surfacer.

Product Data

Size: 1/4″, 3/8″, 1/2″ and 5/8″ x 48″ wide; 8′–14′ long. 1/2″ and 5/8″ also available in 54″ wide.

Weight: 1/4″ – 1.2 lbs/sf; 3/8″ – 1.4 lbs/sf; 1/2″ – 1.6 lbs/sf; 5/8″ – 2.2 lbs/sf.

Thermal Resistance "R": For 1/2″ thickness: 0.45 °F x ft.^{2} x h/Btu (0.08 K x m^2/W).

Thermal Coefficient of Expansion: Unrestrained: 40-100 °F (4-38 °C):
9.0 x 10^{-6} in./in./°F (16.2 x 10^{-6} mm/mm/°C) (16.2 µm/m/°C).

Hygrometric Coefficient of Expansion: Unrestrained: 5-90% r.h.
7.2 x 10^{-6} in./in./% r.h. (7.2 x 10^{-6} mm/mm/% r.h.) (7.2 µm/m/% r.h.).

Packaging: 2 panels per bundle.

Test Data

Surface Burning Characteristics: Flame spread 15, smoke developed 0.

Maximum Frame Spacing Drywall Construction

Direct Application	Panel thickness(1)		Location	Application method(2)	Max. frame spacing o.c.	
	in.	mm			in.	mm
Single-Layer	3/8	9.5	ceilings(3)	perpendicular(4)	16	406
				parallel(4)	16	406
	1/2	12.7	ceilings	perpendicular	24(5)(6)	610
				parallel(4)	16	406
			sidewalls	parallel or perpendicular	24	610
				parallel(4)	16	406
	5/8	15.9	ceilings(6)	perpendicular	24	610
			sidewalls	parallel or perpendicular	24	610
Double-Layer	3/8	9.5	ceilings(7)	perpendicular	16	406
			sidewalls	perpendicular or parallel	24(8)	610
	1/2 and 5/8	12.7 and 15.9	ceilings	perpendicular or parallel	24(8)	610
			sidewalls	perpendicular	24(8)	610

(1) 5/8″ thickness is recommended for the finest single-layer construction, providing increased resistance to fire and transmission of sound; 1/2″ for single-layer application in new residential construction and remodeling; and 3/8″ for repair and remodeling over existing surfaces. (2) Long edge position relative to framing. (3) Not recommended below unheated spaces. (4) Not recommended if water-based texturing material is to be applied. (5) Max. spacing 16″ if water-based texturing material is to be applied. (6) If 1/2″ SHEETROCK® interior ceiling board is used in place of gypsum panels, max. spacing is 24″ o.c. for perpendicular application with weight of unsupported insulation not exceeding 1.3 psf., 16″ o.c. with weight of unsupported insulation not exceeding 2.2 psf. (7) Adhesive must be used to laminate 3/8″ board for double-layer ceilings. (8) Max spacing 16″ o.c. if fire rating required.

Compliance

Meets ASTM C1396.

Submittal Approvals:

Job Name	
Contractor	Date

Trademarks
The following trademarks used herein are owned by United States Gypsum Company or a related company: DURABOND, EASY SAND, FIRECODE, SHEETROCK, TUFF HIDE.

Note
Products described here may not be available in all geographic markets. Consult your U.S. Gypsum Company sales office or representative for information.

Notice
We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

Safety First!
Follow good safety and industrial hygiene practices during handling and installation of all products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read material safety data sheets and related literature on products before specification and/or installation.

Manufactured by
United States Gypsum Company
550 West Adams Street
Chicago, IL 60661

800 USG.4YOU (874-4968)
usg.com

WB1473/rev. 1-07

PROFORM® BRAND JOINT TAPE

MANUFACTURER

National Gypsum Company
2001 Rexford Road
Charlotte, NC 28211
(704) 365-7300

Technical Information:
1-800-NATIONAL
(1-800-628-4662)

Fax: 1-800-FAX NGC1
(1-800-329-6421)

Internet Home Page:
nationalgypsum.com
nationalgypsum.com/espanol

09 29 00/NGC BuyLine: 1100

DESCRIPTION

ProForm® BRAND Joint Tape conceals and reinforces gypsum board joints. The tape is buffed on both sides to ensure the best working qualities and bond. A center creasing process allows easy folding for use at corners.

BASIC USES

ProForm Joint Tape is designed for use with ready mix or setting-type joint compounds and gypsum veneer plaster systems to conceal and reinforce joints of interior walls and ceilings.

ADVANTAGES

- Buffed on both sides for better bond.
- Center crease for ease of folding at corners.
- Easy to apply.
- High strength to resist distortions such as stretching, wrinkling and tearing.

DELIVERY AND STORAGE OF MATERIALS

All materials should be delivered in their original, unopened packages and stored off the ground in an enclosed shelter and protected from weather. Damaged or deteriorated materials should be removed.

STACKING

ProForm Joint Tape should not be stacked more than two pallets in height.

MATERIAL

Cross-fibered paper - 2-1/16" wide

TECHNICAL DATA

PACKAGING & COVERAGE

Package	Coverage Sq. Ft. per roll
75 ft. (22.8 m) Roll - 20 per Carton	200
250 ft. (76.2 m) Roll - 20 per Carton	665
500 ft. (152.4 m) Roll - 10 per Carton	1,330

Coverage - Approximately 375 ft. per 1,000 sq. ft. of gypsum board

(Continued next page)

Job Name _____

Contractor _____ Date _____

Submittal Approvals: (Stamps or Signatures)

APPLICABLE STANDARDS AND REFERENCES

ASTM C 840

Gypsum Association GA-216

Gypsum Association GA-214

National Gypsum Company, *Gypsum Construction Guide*

ProForm BRAND, *Drywall Finishing Products Construction Guide*

JOINT COMPOUND DRYING TIME GUIDE

Approximate Drying Times: Ready Mix Joint Compound

	Temperature						
R.H.	**32°**	**40°**	**50°**	**60°**	**70°**	**80°**	**100°**
0%	38/H	28/H	19/H	13/H	9/H	6/H	3/H
20%	2/D	34/H	23/H	16/H	11/H	8/H	4/H
40%	2.5/D	44/H	29/H	20/H	14/H	10/H	5/H
50%	3/D	2/D	36/H	24/H	17/H	12/H	6/H
60%	3.5/D	2.5/D	42/H	29/H	20/H	13.5/H	8/H
70%	4.5/D	3.5/D	2.25/D	38/H	26/H	19.5/H	10/H
80%	7/D	4.5/D	3.25/D	2.25/D	38/H	27/H	14/H
90%	13/D	9/D	6/D	4.5/D	3/D	49/H	26/H
98%	53/D	37/D	26/D	18/D	12/D	9/D	5/D

Note: R.H. = Relative Humidity D = Days (24 hour period) H = Hours

The chart above is a helpful guide in determining approximate drying times for joint compounds under a variety of humidity/temperature conditions. Shaded area is below the minimum application temperature requirement of 50° and is not recommended for the application of joint compound.

INSTALLATION

RECOMMENDATIONS

Installation of ProForm Joint Tape should be consistent with methods described in the noted standards and references and as indicated below.

ENVIRONMENTAL CONDITIONS

In cold weather (outside temperature below 50°F [10°C]), temperatures within the building should be maintained at a minimum 50°F (10°C), both day and night, during joint finishing. Adequate ventilation should be provided to eliminate excess moisture.

Wet/damp conditions slow the drying process. Adequate drying time is essential to prevent unwanted conditions such as delayed shrinkage. Subsequently, 24 hours' drying time between coats may not be sufficient. (See *Joint Compound Drying Time Guide* above).

PROFORM JOINT TAPE TREATMENT WITH READY MIX JOINT COMPOUNDS

Apply a uniform layer of ready mix joint compound approximately 4" wide over the joints of the gypsum board. Center ProForm Joint Tape over the joint and embed in the compound to ensure a proper bond. Using a broad knife or trowel, remove excess material leaving about 1/32" of compound under the tape and then apply a thin coat of compound over the tape.

Ceiling and wall angles are treated by folding the ProForm Joint Tape to fit the angles and embedding it in the compound. After the compound is thoroughly dry (see *Joint Compound Drying Time Guide* above) apply a second coat of ready mix, feathering about 2" beyond the first coat of compound.

Continue this process until the desired finish is achieved.

All inside corners should be finished with at least one coat of ready mix joint compound with the edges feathered out.

All nail or screw head dimples and flanges of trim beads should receive two coats of ready mix joint compound. The second coat over the beads should be feathered out 9" on both sides.

Allow each application of ready mix joint compound to dry thoroughly, then wet sand if necessary. If dry sanding is preferred, ventilate using an approved respirator and wear eye protection.

PROFORM JOINT TAPE TREATMENT WITH FAST SETTING JOINT COMPOUNDS

Mix the fast setting joint compound per manufacturer's instructions. Do not contaminate the compound with other materials, dirty water or previous mixes. Do not re-temper.

Apply the fast setting joint compound to the joint. Center ProForm Joint Tape over the joint line and embed into the soft compound. Using a broad knife or trowel, remove excess material leaving about 1/32" of compound under the tape.

Allow the treated joints to set prior to the next coat of compound.

PROFORM JOINT TAPE TREATMENT WITH GYPSUM VENEER PLASTER SYSTEMS

Trowel gypsum veneer plaster over the joint line filling the channel formed by the tapered edges of the Kal-Kore® Plaster Base in an even fashion.

Center ProForm Joint Tape over the joint line and embed the tape into the soft plaster. Using a trowel, remove excess material leaving about 1/32" of plaster under the tape.

Allow the treated joints to set prior to general plaster application.

NOTE: For Gypsum Veneer Plaster, during cold weather, maintain a temperature of 55°F (13°C) to 70°F (21°C) before, during and after installation of all system components until veneer plaster has dried.

DECORATION

Before paint, wallcovering or other decorating materials are applied, all areas must be thoroughly dry, dust free and treated with a coat of good-quality, high solids, flat latex primer.

The selection of a paint to give the specified or desired finished characteristics is the responsibility of the architect or contractor.

Gypsum Association GA-214, *Recommended Specification for Levels of Gypsum Board Finish*, should be referred to in order to determine the level of finishing needed to assure a surface properly prepared to accept the desired decoration.

National Gypsum®

PROFORM® BRAND LITE-BLUE JOINT COMPOUND

MANUFACTURER

National Gypsum Company
2001 Rexford Road
Charlotte, NC 28211
(704) 365-7300

Technical Information:
1-800-NATIONAL
(1-800-628-4662)

Fax: 1-800-FAX NGC1
(1-800-329-6421)

Internet Home Page:
nationalgypsum.com
nationalgypsum.com/espanol

09 29 00/NGC BuyLine: 1100

DESCRIPTION

ProForm® BRAND Lite-Blue Joint Compound is a vinyl base ready mix lightweight joint compound. Approximately 30% lighter than conventional ready mix, Lite-Blue Joint Compound pulls and sands easier, pocks less and reduces shrinkage by up to 33%.

BASIC USES

Lite-Blue is designed for use in finishing gypsum board joints, spotting fasteners and finishing cornerbead.

ADVANTAGES

- Lightweight. Approximately 30% lighter than conventional ProForm Joint Compound.
- Reduced shrinkage. Up to 33% less shrinkage than conventional joint compound.
- Superior finish. Provides a finish with less pocking and pin holing.
- Easier pull. Spreads easier for quick application.
- Finishes metal beads with two coats.
- Excellent sanding characteristics.
- Ready to use right from container after mixing.
- Low VOC content - less than 2 grams/liter.

GREENGUARD CERTIFIED

ProForm Lite-Blue Joint Compound is GREENGUARD Indoor Air Quality Certified® for indoor air quality.

GREENGUARD® Indoor Air Quality Certified

LIMITATIONS

- Use nothing coarser than a 150 grit sandpaper or a 220 grit abrasive mesh cloth for any sanding.
- Protect from freezing and exposure to extreme heat and direct sunlight, conditions which will cause premature aging of the product.
- Do not overthin.
- Excessive mixing with an electric drill can cause undesirable changes in viscosity and in finished surface appearance.

STORAGE

Storage life varies with climatic conditions, up to 9 months under good conditions. Store compound away from extreme cold or heat to avoid accelerated aging. Regularly check production dates and rotate inventory on a first-in, first-out plan.

If Lite-Blue Joint Compound freezes, allow material to thaw at room temperature for at least 24 hours. When thawed, turn the container upside-down for at least 15 minutes. Turn pail right side up, remove lid and immediately remix with an electric drill. Lite-Blue should be lump-free and ready to use within 1 minute. Discard all joint compound that does not remix to a lumpfree consistency.

STACKING

Lite-Blue pails should not be stacked more than two pallets in height.

ACCESSORIES

- ProForm Joint Tape
- Cornerbead, trims, casing beads
- Multi-Flex Tape
- E-Z Strip control joints or .093 zinc control joints

Job Name _____

Contractor _____ Date _____

Submittal Approvals: (Stamps or Signatures)

TECHNICAL DATA

PACKAGING & COVERAGE

Package	Coverage per 1,000 Sq. Ft. (100 Sq. M)*	Coverage per container Sq.Ft. (Sq. M)*
3.5 gallon (13.2 L) Carton	8-8.2 Gal (32.6-33.4 L)	427-438 (40-41)
3.5 gallon (13.2 L) Pail	8-8.2 Gal (32.6-33.4 L)	427-438 (40-41)
4.5 gallon (17 L) Pail	8-8.2 Gal (32.6-33.4 L)	550-563 (51-52)

**Coverage varies with number of cornerbeads and trims used.*

APPLICABLE STANDARDS AND REFERENCES

ASTM C 475

ASTM C 840

Gypsum Association GA-216

Gypsum Association GA-214

National Gypsum Company, *Gypsum Construction Guide*

ProForm BRAND, *Drywall Finishing Products Construction Guide*

APPROXIMATE DRYING TIMES

	Temperature						
R.H.	**32°**	**40°**	**50°**	**60°**	**70°**	**80°**	**100°**
0%	38/H	28/H	19/H	13/H	9/H	6/H	3/H
20%	2/D	34/H	23/H	16/H	11/H	8/H	4/H
40%	2.5/D	44/H	29/H	20/H	14/H	10/H	5/H
50%	3/D	2/D	36/H	24/H	17/H	12/H	6/H
60%	3.5/D	2.5/D	42/H	29/H	20/H	13.5/H	8/H
70%	4.5/D	3.5/D	2.25/D	38/H	26/H	19.5/H	10/H
80%	7/D	4.5/D	3.25/D	2.25/D	38/H	27/H	14/H
90%	13/D	9/D	6/D	4.5/D	3/D	49/H	26/H
98%	53/D	37/D	26/D	18/D	12/D	9/D	5/D

Note: R.H. = Relative Humidity D = Days (24 hour period) H = Hours

The chart above is a helpful guide in determining approximate drying times for joint compounds under a variety of humidity/temperature conditions. Shaded area is below the minimum application temperature requirement of 50° and is not recommended for the application of joint compound.

COMPOSITION & MATERIALS

May contain any of the following:

Component	**CAS No.**
Limestone	1317-65-3
Plaster of Paris	10034-76-1
Gypsum	13397-24-5
Perlite	93763-70-3
Talc	14807-96-6
Mica	12001-26-2
Clay	1302-78-9
	1332-58-7
	66402-68-4
	8031-18-3
Water	7732-18-5
Latex	————

VOC Content: <2g/L
Contains No Asbestos

INSTALLATION

RECOMMENDATIONS

Installation of Lite-Blue should be consistent with methods described in the noted standards and references and as indicated below.

Lite-Blue may need a slight amount of mixing before use, and in any case should be lightly mixed before any water is added. Mixing may be done with a potato-masher-type device or by using a low-speed drill. Use directly from the container for treating fasteners and cornerbeads or for taping and finishing joints. Care should be taken when water is added to thin to a desired consistency.

Apply a uniformly thin layer of Lite-Blue approximately 4" wide over the joints of the gypsum board. Center tape over the joint and embed in the compound to ensure a proper bond. A thin coat of compound should cover the tape to minimize wrinkling or curling. Ceiling and wall angles are treated by folding the tape to fit the angles and embedding it in the compound.

After the compound is thoroughly dry (approximately 24 hours), cover the tapered joint with a first finish coat of Lite-Blue. Spread compound over the tape about 3" to each side of the tape and feather out at the edge. Do not crown the joint with this coat since Lite-Blue is low shrinkage and will not draw back flush to the wallboard surface. After this coat is thoroughly dry, a second finish coat of compound is applied with a slight uniform crown over the joint. This coat should be smooth, with the edges feathered out.

All inside corners should be finished with at least one coat of Lite-Blue, with the edges feathered out.

All nail or screw head dimples and flanges of cornerbeads should receive two coats of Lite-Blue. The second coat over the beads should be feathered out 9" on both sides.

Allow each application of Lite-Blue to dry thoroughly, then wet sand if necessary. If dry sanding is preferred, ventilate using an approved respirator, and wear eye protection.

In cold weather (outside temperature below 50°F [10°C]), temperatures within the building should be maintained at a minimum 50°F (10°C), both day and night, during joint finishing. Adequate ventilation should be provided to eliminate excess moisture.

Wet/damp conditions slow the drying process; subsequently, 24 hours' drying time between coats may not be sufficient. Adequate drying time is essential to prevent unwanted conditions such as cracks from delayed shrinkage.

DECORATION

Before paint, wall covering or other decorating materials are applied, all areas must be thoroughly dry, dust free and treated with a coat of good-quality, high solids, flat latex primer.

The selection of a paint to give the specified or desired finished characteristics is the responsibility of the architect or contractor.

Gypsum Association GA-214, *Recommended Specification for Levels of Gypsum Board Finish*, should be referred to in order to determine the level of finishing needed to assure a surface properly prepared to accept the desired decoration.

National Gypsum®

PROFORM® BRAND ULTRA LITE ALL PURPOSE JOINT COMPOUND

MANUFACTURER

National Gypsum Company
2001 Rexford Road
Charlotte, NC 28211
(704) 365-7300

Technical Information:
1-800-NATIONAL
(1-800-628-4662)

Fax: 1-800-FAX NGC1
(1-800-329-6421)

Internet Home Page:
nationalgypsum.com
nationalgypsum.com/espanol

09 29 00/NGC BuyLine: 1100

DESCRIPTION

ProForm® BRAND Ultra Lite All Purpose Joint Compound is a vinyl base ready mix lightweight joint compound. Up to 40% lighter than conventional weight joint compound, Ultra Lite pull and sands easier and reduces shrinkage by up to 33%.

BASIC USES

Ultra Lite Joint Compound is designed for tape application, fastener spotting and complete joint finishing of gypsum board. It can also be used to repair cracks in plastered walls, to texture surfaces and to laminate gypsum board to other surfaces such as masonry or other gypsum board. It contains sufficient binder to secure the reinforcing tape and develops its strength and hardness by drying.

ADVANTAGES

- Up to 40% lighter than conventional weight joint compound.
- Excellent for all phases of finishing.
- Applies and sands with ease.
- Excellent open time.
- Superior bond with ProForm® BRAND paper joint tape.
- Can be used in all taping tools.
- Eliminates the need for more than one type of compound on the job.
- Low VOC content - less than 2 grams/liter.

GREENGUARD CERTIFIED

ProForm Ultra Lite All Purpose Joint Compound is GREENGUARD Children & Schools℠ Certified for indoor air quality.

LIMITATIONS

- Use nothing coarser than a 150 grit sandpaper or a 220 grit abrasive mesh cloth for any sanding.
- Protect from freezing and exposure to extreme heat and direct sunlight, conditions which will cause premature aging of the product.
- Do not overthin.
- Excessive mixing with an electric drill can cause undesirable changes in viscosity and in finished surface appearance.

STORAGE

Storage life varies with climatic conditions, up to 9 months under good conditions. Store compound away from extreme cold or heat to avoid accelerated aging. Regularly check production dates and rotate inventory on a first-in, first-out plan.

If Ultra Lite Joint Compound freezes, allow material to thaw at room temperature for at least 24 hours. When thawed, turn the container upside-down for at least 15 minutes. Turn pail right side up, remove lid and immediately remix with an electric drill. Ultra Lite should be lump-free and ready to use within 1 minute. Discard all joint compound that does not remix to a lumpfree consistency.

STACKING

Ultra Lite pails should not be stacked more than two pallets in height.

ACCESSORIES

- ProForm Joint Tape
- Cornerbead, trims, casing beads
- Multi-Flex Tape
- E-Z Strip control joints or .093 zinc control joints

Job Name _____

Contractor _____ Date _____

Submittal Approvals: (Stamps or Signatures)

Georgia-Pacific

DensShield®
Tile Backer

Technical Service Hotline 1.800.225.6119 or
www.densshield.com

5/8″ (15.9 mm) DensShield® Fireguard® Tile Backer is UL and ULC classified as Type DS and included in numerous assembly designs invested by UL and ULC for hourly fire resistance ratings, including1-hour and 2-hour wall assemblies.

5/8″ (15.9 mm) DensShield Fireguard Tile Backer is classified as "Type X" in accordance with ASTM C 1178 and may replace Type X gypsum board specified in generic rated wall assemblies listed in the Gypsum Association Fire Reference Design Manual, Publication GA-600.

DensShield Tile Backer has passed the Robinson Floor Test/ASTM C 627 in both 1/4″ (6.4 mm) and 1/2″ x 4′ (12.7 mm x 1220 mm) wide thicknesses with a rating of light commercial.

Sizes and Edges

Thickness	Width x Length
1/4″ (6.4 mm)	4′ x 4′ (1220 mm x 1220 mm)
1/2″ (12.7 mm)	32″x 5′ (813 mm x 1524 mm) 4′ x 5′ (1220 mm x 1524 mm) 4′ x 8′ (1220 mm x 2438 mm)
5/8″ (15.9 mm)	4′ x 8′ (1220 mm x 2438 mm)

Edges: Square
Conforms to ASTM C 1178 Fiberglass Mat Water-Resistant Gypsum Backing Panel

Georgia-Pacific Gypsum

U.S.A.– Georgia-Pacific Gypsum LLC
Canada – Georgia-Pacific Canada LP

SALES INFORMATION AND ORDER PLACEMENT

U.S.A. Midwest: **1-800-876-4746** West: **1-800-824-7503**
South: **1-800-327-2344** Northeast: **1-800-947-4497**

CANADA Canada Toll Free: **1-800-387-6823**
Quebec Toll Free: **1-800-361-0486**

TECHNICAL INFORMATION

U.S.A. and Canada: **1-800-225-6119**
www.gpgypsum.com

Member of TCNA
Tile Council of North America, Inc.

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WARRANTIES, REMEDIES AND TERMS OF SALE For current warranty information for this product, please go to www.gpgypsum.com and select the product for warranty information. All sales of this product by Georgia-Pacific are subject to our Terms of Sale available at www.gpgypsum.com.

UPDATES AND CURRENT INFORMATION The information in this document may change without notice. Visit our website at www.gpgypsum.com for updates and current information.

CAUTION For product fire, safety and use information, go to www.gp.com/safetyinfo or call 1-800-225-6119.

HANDLING AND USE–CAUTION This product contains fiberglass facings which may cause skin irritation. Dust and fibers produced during the handling and installation of the product may cause skin, eye and respiratory tract irritation. Avoid breathing dust and minimize contact with skin and eyes. Wear long sleeve shirts, long pants and eye protection. Always maintain adequate ventilation. Use a dust mask or NIOSH/MSHA approved respirator as appropriate in dusty or poorly ventilated areas.

FIRE SAFETY CAUTION Passing a fire test in a controlled laboratory setting and/or certifying or labeling a product as having a one-hour, two-hour, or any other fire resistance or protection rating and, therefore, as acceptable for use in certain fire rated assemblies/systems, does not mean that either a particular assembly/system incorporating the product, or any given piece of the product itself, will necessarily provide one-hour fire resistance, two-hour fire resistance, or any other specified fire resistance or protection in an actual fire. In the event of an actual fire, you should immediately take any and all actions necessary for your safety and the safety of others without regard for any fire rating of any product or assembly/system.

GYPSUM BOARD Guide Specification
National Gypsum Company

*(**Specifier Note**: The purpose of this guide specification language is to assist the specifier in correctly specifying gypsum board products and their installation. The specifier needs to edit these guide specifications to fit the needs of each specific project. Contact National Gypsum Company to assist in appropriate product selections.*

*Specifier Notes included in (italicized red text) are included to provide assistance in selecting appropriate text for inclusion in a Specification. [**Bold text**] indicates a selection is required. Text in the brackets may not be the only options available, but are recommended or common selections.)*

SECTION 09 29 00
GYPSUM BOARD

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Standard Gypsum Board (Gold Bond® BRAND Gypsum Board)

B. Fire-Resistance Rated Gypsum Board (Gold Bond® BRAND Fire-Shield® Gypsum Board, and Gold Bond® BRAND Fire-Shield® C Gypsum Board)

C. Lightweight Gypsum Board (Gold Bond® BRAND High Strength LITE™ Gypsum Board, Gold Bond® BRAND High Strength Fire-Shield® LITE™ Gypsum Board and Gold Bond® BRAND High Strength Fire-Shield® LITE™ 30 Gypsum Board)

D. Mold and Moisture Resistant Gypsum Board (Gold Bond® BRAND XP® Gypsum Board)

E. Fire-Resistance Rated Gypsum Board with Enhanced Mold and Mildew Resistance (Gold Bond® BRAND XP® Fire-Shield® Gypsum Board, and Gold Bond® BRAND XP® Fire-Shield® C Gypsum Board)

F. Exterior Gypsum Ceiling Board (Gold Bond® BRAND Exterior Soffit Board, and Gold Bond® BRAND Fire-Shield® Exterior Soffit Board)

G. Gypsum Shaftliner Panel (Gold Bond® BRAND 1” Fire-Shield® Shaftliner)

H. Mold and Moisture Resistant Gypsum Shaftliner Panel (Gold Bond® BRAND 1” Fire-Shield® Shaftliner XP®)

I. Extended Exposure Shaftliner Panel (Gold Bond® BRAND eXP® Extended Exposure Shaftliner)

J. Abuse Resistant Gypsum Board (Gold Bond® BRAND Hi-Abuse® XP® Gypsum Board)

K. High Impact Gypsum Board (Gold Bond® BRAND Hi-Impact® XP® Gypsum Board)

L. Flexible Gypsum Board (Gold Bond® BRAND High Flex® Gypsum Board)

M. Acoustically Enhanced Gypsum Board (Gold Bond® BRAND SoundBreak® XP® Gypsum Board)

N. Interior Extended Exposure Gypsum Panel (Gold Bond® BRAND eXP® Interior Extreme® Gypsum Panel, Gold Bond® BRAND eXP® Fire-Shield® Interior Extreme® Gypsum Panel, Gold Bond® BRAND eXP® Interior Extreme® IR Gypsum Panel, and Gold Bond® BRAND eXP® Interior Extreme® AR Gypsum Panel)

O. Mold and Mildew Resistant Tile Backer (Gold Bond® BRAND eXP® Tile Backer)

P. Cement Board (PermaBase® BRAND Cement Board)

Q. Flexible Cement Board (PermaBase Flex® BRAND Cement Board)

R. Gypsum Sheathing (Gold Bond® BRAND Gypsum Sheathing)

S. Fire-Resistance Rated Gypsum Sheathing (Gold Bond® BRAND Fire-Shield® Jumbo Gypsum Sheathing)

T. Extended Exposure Sheathing (Gold Bond® BRAND eXP® Extended Exposure Gypsum Sheathing)

U. Fire-Resistance Rated Extended Exposure Gypsum Sheathing (Gold Bond® BRAND eXP® Fire-Shield® Extended Exposure Gypsum Sheathing)

1.2 REFERENCE STANDARDS

*(**Specifier Note**: EDIT list of reference standards based on standards that remain in the text body once section has been edited for specific project.)*

A. American National Standards Institute (ANSI)

1. ANSI A 108.11 - Interior Installation of Cementitious Backer Units
2. ANSI A 118.9 - American National Standard Specification for Test Methods and Specifications for Cementitious Backer Units

B. ASTM International

1. ASTM C 473 - Standard Test Methods for Physical Testing of Gypsum Panel Products
2. ASTM C 840 - Standard Specification for Application and Finishing of Gypsum Board
3. ASTM C 919 - Standard Practice for Use of Sealants in Acoustical Applications
4. ASTM C 920 - Standard Specification for Elastomeric Joint Sealants.
5. ASTM C 1002 - Standard Specification for Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs
6. ASTM C 1177 - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing
7. ASTM C 1178 - Standard Specification for Coated Glass Mat Water Resistant Gypsum Backing Panel
8. ASTM C 1280 - Standard Specification for Application of Gypsum Sheathing
9. ASTM C 1325 - Standard Specification for Non-Asbestos Fiber-Mat Reinforced Cementitious Backer Units
10. ASTM C 1396 - Standard Specification for Gypsum Board
11. ASTM C 1629 - Standard Classification for Abuse Resistant Nondecorated Interior Gypsum Panel Products and Fiber reinforced Cement Panels
12. ASTM C 1658 - Standard Specification for Glass Mat Gypsum Panels
13. ASTM D 3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber
14. ASTM E 72 - Standard Test Methods of Conducting Strength Tests of Panels for Building Construction
15. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials
16. ASTM E 90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements

17. ASTM E 96 - Standard Test Methods for Water Vapor Transmission of Materials
18. ASTM E 119 - Standard Test Methods for Fire Tests of Building Construction and Materials
19. ASTM E 136 - Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 176; C.
20. ASTM G 21 - Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi

C. Gypsum Association (GA)

1. GA-214 - Recommended Levels of Gypsum Board Finish
2. GA-216 - Application and Finishing of Gypsum Panel Products
3. GA-253 - Application of Gypsum Sheathing

1.3 SUBMITTALS

*(**Specifier Note**: GREENGUARD certification is optional, visit www.greenguard.org for program information. DELETE paragraph and sub-paragraphs below if not project specific.)*

A. GREENGUARD Submittal:

*(**Specifier Note**: Products that have achieved GREENGUARD Children and Schools Certification meet stricter emission guidelines than those with GREENGUARD Indoor Air Quality Certification. GREENGUARD Children and Schools Certification also meet CHPS Low-Emitting Materials.)*

The following National Gypsum products are GREENGUARD Indoor Air Quality Certified®:

- *ProForm Brand All Purpose Ready Mix Joint Compound*
- *ProForm Brand All Purpose Machine Grade Ready Mix Joint Compound*
- *ProForm Brand Multi-Use Ready Mix Joint Compound*
- *ProForm Brand Taping Ready Mix Joint Compound*
- *ProForm Brand Topping Ready Mix Joint Compound*
- *ProForm Brand Lite Ready Mix Joint Compound*
- *ProForm Brand Lite Blue Ready Mix Joint Compound*
- *ProForm Brand Lite Ready Mix Joint Compound with Dust-Tech*

The following National Gypsum products bear the GREENGUARD Children & Schools℠ Certified mark:

- *Gold Bond Brand Gypsum Board*
- *Gold Bond Brand Fire-Shield Gypsum Board*
- *Gold Bond Brand High Strength LITE Gypsum Board*
- *Gold Bond Brand High Strength Fire-Shield LITE Gypsum Board*
- *Gold Bond Brand High Strength Fire-Shield LITE 30 Gypsum Board*
- *Gold Bond Brand Hi-Abuse XP Gypsum Board*
- *Gold Bond Brand Hi-Impact XP Gypsum Board*
- *Gold Bond Brand SoundBreak XP Gypsum Board*
- *Gold Bond Brand XP Gypsum Board*
- *Gold Bond Brand eXP Interior Extreme Gypsum Board*
- *Gold Bond Brand eXP Interior Extreme AR Gypsum Board*
- *Gold Bond Brand eXP Interior Extreme IR Gypsum Board*
- *Gold Bond Brand eXP Tile Backer*
- *PermaBase Brand Cement Board*
- *PermaBase Brand Flex Cement Board*
- *ProForm Brand Quick Set Setting Joint Compound*
- *ProForm Brand Quick Set Lite Setting Joint Compound*
- *ProForm Brand XP Ready Mix Joint Compound*

1. Product Certificate for GREENGUARD **[Indoor Air Quality] [Children & Schools]**: For products and materials required to comply with requirements for minimum chemical emissions

PART 2 - PRODUCTS

2.1 MANUFACTURER

*(**Specifier Note**: Throughout Part-2 maintain brand names when proprietary specification is acceptable. Use generic term when project must be competitively bid. CONFIRM product requirements and characteristics prior to listing products of other manufacturers.)*

A. Products of National Gypsum Company

2.2 STANDARD GYPSUM BOARD

A. Basis of Design: Gold Bond® BRAND Gypsum Board

1. Panel Physical Characteristics

a. Core: Regular gypsum core
b. Surface Paper: 100 percent recycled content paper on front, back and long edges
c. Long Edges: **[Square] [Tapered]**
d. Overall thickness: **[1/4 inch] [3/8 inch] [1/2 inch]**
e. Panel complies with requirements of ASTM C 1396

2.3 FIRE-RESISTANCE RATED GYPSUM BOARD

A. Basis of Design: Gold Bond® BRAND Fire-Shield® Gypsum Board

1. Type X, Panel Physical Characteristics

a. Core: Fire-resistance rated gypsum core
b. Surface paper: 100 percent recycled content paper on front, back and long edges
c. Long Edges: **[Square] [Tapered]**
d. Overall thickness: 5/8 inch
e. Panel complies with Type X requirements of ASTM C 1396

*(**Specifier Note**: National Gypsum Co, Gold Bond BRAND Fire-Shield C Gypsum Board has enhanced fire-resistance characteristics from the Gold Bond BRAND Fire-Shield X Gypsum Board. In non-proprietary rated designs, Type C may be used to replace Type X. Type X cannot be used to replace Type C fire-resistance rated gypsum board. Assembly design should be used to determine use of Type C fire-resistance rated gypsum board.)*

B. Basis of Design: Gold Bond® BRAND Fire-Shield C™ Gypsum Board

1. Type C, Panel Physical Characteristics

a. Core: Enhanced fire-resistance rated (Type C) gypsum core
b. Surface paper: 100 percent recycled content paper on front, back and long edges
c. Long Edges: **[Square] [Tapered]**
d. Overall thickness: **[1/2 inch] [5/8 inch]**
e. Panel complies with Type X requirements of ASTM C 1396

2.4 LIGHTWEIGHT GYPSUM BOARD

A. Basis of Design: Gold Bond® BRAND High Strength LITE™ Gypsum Board

1. Panel Physical Characteristics

a. Core: Regular gypsum core
b. Surface paper: 100 percent recycled content paper on front, back and long edges
c. Long Edges: Tapered
d. Overall thickness: 1/2 inch
e. Panel complies with requirements of ASTM C 1396

B. Basis of Design: Gold Bond® BRAND High Strength Fire-Shield® LITE™ Gypsum Board

1. Panel Physical Characteristics

a. Core: Fire-resistance rated gypsum core
b. Surface paper: 100 percent recycled content paper on front, back and long edges
c. Long Edges: Square or Tapered
d. Overall thickness: 5/8 inch
e. Panel complies with Type X requirements of ASTM C 1396

*(**Specifier Note**: National Gypsum Co, Gold Bond BRAND High Strength Fire-Shield LITE™ 30 is for use in non-rated assemblies but can be used in specific 30-minute rated assemblies, contact National Gypsum Co, for appropriate tested assemblies.*

C. Basis of Design: Gold Bond® BRAND High Strength Fire-Shield® LITE™ 30 Gypsum Board

1. Panel Physical Characteristics

a. Core: Fire-resistance rated (Non-Type X) gypsum core
b. Surface paper: 100 percent recycled content paper on front, back and long edges
c. Long Edges: Tapered
d. Overall thickness: 5/8 inch
e. Panel complies with requirements of ASTM C 1396

2.5 MOLD AND MOISTURE RESISTANT GYPSUM BOARD

A. Basis of Design: Gold Bond® BRAND XP Gypsum Board

1. Panel Physical Characteristics

a. Core: Mold and moisture resistant gypsum core
b. Surface paper: 100 percent recycled content moisture/mold/mildew resistant paper on front, back, and long edges
c. Long Edges: **[Square] [Tapered]**
d. Overall thickness: 1/2 inch
e. Panel complies with requirements of ASTM C 1396

*(**Specifier Note**: National Gypsum Co, Gold Bond BRAND XP Gypsum Board has the following mold/mildew resistance characteristics. VERIFY conformance of this requirement when specification section must provide products of equivalent design or DELETE when characteristic is not critical.)*

f. Mold/Mildew Resistance: 10 when tested in accordance with ASTM D 3273

*(**Specifier Note**: DELETE paragraph below if environmental requirement is not project specific)*

g. Environmental Requirements: Provide products that comply with testing and product requirements for low emitting materials

2.6 FIRE-RESISTANCE RATED GYPSUM BOARD WITH ENHANCED MOLD AND MILDEW RESISTANCE

A. Basis of Design: Gold Bond® BRAND XP® Fire-Shield® Gypsum Board

1. Type X, Panel Physical Characteristics

a. Core: Mold and moisture resistant, fire-resistance rated gypsum core
b. Surface paper: 100 percent recycled content moisture/mold/mildew resistant paper on front, back and long edges
c. Long Edges: **[Square] [Tapered]**
d. Overall thickness: 5/8 inch
e. Panel complies with Type X requirements of ASTM C 1396

*(**Specifier Note**: National Gypsum Co, Gold Bond BRAND XP Fire-Shield Gypsum Board has the following mold/mildew resistance characteristics. VERIFY conformance of this requirement when specification section must provide products of equivalent design or DELETE when characteristic is not critical.)*

f. Mold/Mildew Resistance: 10 when tested in accordance with ASTM D 3273

*(**Specifier Note**: National Gypsum Co, Gold Bond BRAND XP Fire-Shield C Gypsum Board has enhanced fire-resistance characteristics from the Gold Bond BRAND Fire-Shield X Gypsum Board. In non-proprietary rated designs, Type C may be used to replace Type X. Type X cannot be used to replace Type C fire-resistance rated gypsum board. Assembly design should be used to determine use of Type C fire-resistance rated gypsum board.)*

B. Basis of Design: Gold Bond® BRAND XP® Fire-Shield® C Gypsum Board

1. Type C, Panel Physical Characteristics

a. Core: Mold and moisture resistant gypsum core with enhanced fire-resistance (Type C)
b. Surface paper: 100 percent recycled content moisture/mold/mildew paper on front, back and long edges
c. Long Edges: **[Square] [Tapered]**
d. Overall thickness: **[5/8 inch] [1/2 inch]**
e. Panel complies with requirements Type X of ASTM C 1396

*(**Specifier Note**: National Gypsum Co, Gold Bond BRAND XP Fire-Shield C Gypsum Board has the following mold/mildew resistance characteristics. VERIFY conformance of this requirement when specification section must provide products of equivalent design or DELETE when characteristic is not critical ASTM D 3273 is on a 10 point scale.)*

f. Mold/Mildew Resistance: 10 when tested in accordance with ASTM D 3273

2.7 EXTERIOR GYPSUM CEILING BOARD

A. Basis of Design: Gold Bond® BRAND Exterior Soffit Board

1. Panel Physical Characteristics

a. Core: Regular gypsum core
b. Surface paper: 100 percent recycled content extra resistance to moisture and sagging
c. Long Edges: Beveled -Tapered
d. Overall thickness: 1/2 inch