Quiet has never been so loud.
Peace and Quiet Without the Noise of Demolition.

Good fences have always made good neighbors. But in the close quarters of today’s living and working environments, good walls make even better neighbors. SoundBreak XP Retrofit® Board lets you create quieter, more private spaces in all kinds of residential, multifamily and commercial buildings without the sensory assault that comes with demolishing walls. This innovative Gold Bond® product was designed specifically to improve the acoustical performance of an EXISTING wall assembly without the need for disruptive demolition.
Installs Over EXISTING Interior Gypsum Board Walls

Existing hotel rooms, townhomes and medical examining rooms often have one common problem – walls that have ears. Guests and residents complain about noise from nearby neighbors, and patients may overhear sensitive conversations they shouldn’t. It’s time to quiet the noise. And the complaints.

What It’s Made Of

Gold Bond® BRAND SoundBreak XP Retrofit® is a 5/16” sound-damping gypsum board with a viscoelastic polymer adhered to the back paper. Its high-density core is encased in heavy mold, mildew and moisture-resistant PURPLE® face paper.

Where You Put It

SoundBreak XP Retrofit® can be installed over an EXISTING interior gypsum board wall where sound transmission between rooms or dwellings is a concern. The best part is, there is no demolition!

How It Excels

In addition to adding a little peace and quiet, SoundBreak XP Retrofit®:

- Is simple to install
- Installs over existing gypsum board – no demolition required
- Provides a thinner wall assembly without sacrificing square footage
- Is a consistent product, manufactured in a controlled environment versus inconsistent field applications and methods

Day after day, night after night, in residential, multifamily and commercial buildings, silence is no longer golden – it’s PURPLE®.
FAQs

**What is the ideal wall application for SoundBreak XP Retrofit®?**
A demising wall application – walls with no penetrations such as windows or doors.

**Can I use SoundBreak XP Retrofit® on the ceiling?**
No, 5/16" panels are not permitted for ceiling applications.

**Can I use nails instead of screws?**
No, screws are required to ensure adequate bond to existing surface.

**Can I use adhesive without fasteners?**
No, it is intended to be installed with both adhesive and fasteners.

**Can SoundBreak XP Retrofit® be installed horizontally?**
No, vertical application provides superior acoustical performance.

**Do I have to remove wall moldings prior to installing SoundBreak XP Retrofit®?**
Yes, SoundBreak XP Retrofit® must cover entire wall surface.

**Can SoundBreak XP Retrofit® be installed over wood paneling?**
No, SoundBreak XP Retrofit® is intended to be installed over an existing gypsum board wall in order to achieve optimal acoustical performance.

**Which side of the SoundBreak XP Retrofit® faces out?**
Refer to the sticker located on the back of the board. The PURPLE® face should be visible to the installer once the installation is complete.

**How do I cut SoundBreak XP Retrofit®?**
SoundBreak XP Retrofit® can be cut using a standard utility knife. Power tools should not be used for cutting, because the polymer can damage the blade.

**Does SoundBreak XP Retrofit® finish like standard gypsum board?**
Yes, SoundBreak XP Retrofit® can be finished and decorated with standard drywall finishing products.
Transmission of Airborne Sound

Airborne sound is acoustical energy generated by a source and transmitted by vibration through the air. The vibrations create sound pressure fluctuations that are detected by a receiver.

Sound is characterized by its frequency, which determines the pitch of the sound, and by the intensity of the pressure fluctuations, which determines how loud the sound is perceived to be.

The frequency of sound refers to the number of sound pressure fluctuations or cycles that occur at a fixed point in one second. The unit of measure for frequency is the hertz (Hz), which is one cycle per second. The human auditory system is capable of detecting sound frequencies between 20 Hz and 20,000 Hz, but humans are typically most sensitive to sounds within the range of 500 Hz and 4,000 Hz. Sound frequency is perceived by humans as pitch. The lowest note on a piano has a frequency of 27.5 Hz, while the highest note on the piano is 4,186 Hz.

Decibel

The intensity of sound, or loudness, is measured in decibels (dB). A quiet whisper might register at 20 dB, compared to about 60 dB for normal conversation, and 75 dB for loud singing. The decibel scale is logarithmic, not linear. A sound level change of 1 to 2 dB will be difficult to perceive, while a change of 5 dB will be clearly noticeable. Sound is perceived to double in intensity for every 10 dB increase and quadruple for every 20 dB increase.

Sound Transmission Class

The Sound Transmission Class (STC) is a single number rating of the effectiveness of a material or construction assembly to retard the transmission of airborne sound. The STC provides an indication of how loud transmitted sound is perceived to be by the listener. Partitions with higher STC values are more effective at reducing sound transmission.

STC values are derived by conducting a test in accordance with ASTM E90, Standard Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions. The test data collected is analyzed using ASTM E413, Classification for Rating Sound Insulation, and results in a single-number acoustical rating. The rating assesses the airborne sound transmission performance at a range of frequencies from 125 Hz to 4000 Hz, which is consistent with the frequency range of the human ear. An STC rating of 50 has been designated as the minimum allowable design rating for unit-to-unit multifamily construction in the International Building Code.

<table>
<thead>
<tr>
<th>RATING</th>
<th>ACTIVITY</th>
<th>SOUND LEVEL (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Painful</td>
<td>Jet Engine</td>
<td>120 +</td>
</tr>
<tr>
<td>Very Loud</td>
<td>Industrial Machinery</td>
<td>100</td>
</tr>
<tr>
<td>Loud</td>
<td>Stock Trading Floor</td>
<td>80</td>
</tr>
<tr>
<td>Moderate</td>
<td>Normal Speech</td>
<td>65</td>
</tr>
<tr>
<td>Quiet</td>
<td>Suburban Home</td>
<td>45</td>
</tr>
<tr>
<td>Very Quiet</td>
<td>Barely Audible</td>
<td>25</td>
</tr>
</tbody>
</table>

HUMAN SENSITIVITY TO CHANGES IN SOUND INTENSITY LEVELS

<table>
<thead>
<tr>
<th>SOUND INTENSITY LEVEL (dB)</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 dB</td>
<td>Generally not perceptible</td>
</tr>
<tr>
<td>3 dB</td>
<td>Just perceptible</td>
</tr>
<tr>
<td>5 dB</td>
<td>Clearly noticeable</td>
</tr>
<tr>
<td>10 dB</td>
<td>Twice as loud</td>
</tr>
<tr>
<td>20 dB</td>
<td>Four times as loud</td>
</tr>
</tbody>
</table>

Key Acoustical Terms and Concepts
### Product Details

#### Sizes

5/16 in. (7.9 mm) thick boards are available in a 4 ft. (1,219 mm) width and in a standard length of 10 ft. (3,048 mm).

#### Finishing

Slightly tapered edges allow joints to be reinforced with ProForm® BRAND Joint Tape and concealed with ProForm® BRAND Ready Mix Joint Compounds or ProForm® BRAND Quick Set™ Setting Compounds. For optimum mold and mildew performance, use ProForm® BRAND XP® All Purpose Joint Compound or ProForm® BRAND XP® Lite Joint Compound.

1. Heavy Mold-, Mildew- and Moisture-Resistant Face Paper
2. Slightly Tapered Edge
3. Enhanced High-Density Mold-Resistant Core
4. Viscoelastic Polymer
5. Heavy Mold-, Mildew- and Moisture-Resistant Back Paper
Basic Uses

Applications

- Use SoundBreak XP Retrofit® to improve the acoustical performance of an existing wall assembly and to achieve a higher Sound Transmission Class (STC) rating for existing interior gypsum board walls where sound transmission has become a concern.

- Install 5/16 in. (7.9 mm) thick SoundBreak XP Retrofit® over existing interior gypsum board walls in residential, multifamily and commercial applications for additional sound damping between rooms or dwelling units.

Advantages

- No demolition required to existing wall assembly.

- When installing over an existing interior wall assembly, SoundBreak XP Retrofit® enhances Sound Transmission Class (STC) values per an independent third-party acoustical laboratory using ASTM E90 test procedures.

- Achieves increased STC values in a thinner wall assembly, increasing usable floor space.

- Superior sound damping, cost-efficient material that finishes easily and decorates in the same manner as standard gypsum board.

- For speed of installation and lower installation costs, vertical board joints do not require acoustical sealant.

- Heavy abrasion-resistant paper and dense core provide greater resistance to surface abuse when tested in accordance with ASTM C1629.

- Resists the growth of mold per ASTM D3273 with a score of 10, the best possible score.

- Resists the growth of mold per ASTM G21 with a score of 0, the best possible score.

- Fire-resistant material with a gypsum core will not support combustion or transmit temperatures greatly in excess of 212°F (100°C) until completely calcined, a slow process.

- Dimensionally stable product with negligible expansion and contraction under normal atmospheric conditions.

- Features GridMarX® guide marks on the board to allow for faster and more accurate installation.

- Achieves GREENGUARD and GREENGUARD Gold Certification. GREENGUARD Certified products are certified to GREENGUARD standards for low chemical emissions into indoor air during product usage. For more information, visit: ul.com/gg.

- Qualifies as a low-VOC emitting material by meeting California Specification 01350. For more information, visit: http://www.calrecycle.ca.gov/greenbuilding/specs/section01350/.
## Technical Data

### PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>SoundBreak XP Retrofit® Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness, Nominal</td>
<td>5/16” (7.9 mm)</td>
</tr>
<tr>
<td>Width, Nominal</td>
<td>4’ (1,219 mm)</td>
</tr>
<tr>
<td>Length, Standard</td>
<td>10’ (3,048 mm)</td>
</tr>
<tr>
<td>Weight, Nominal</td>
<td>1.3 – 1.4 lbs. / sq. ft. (6.35 – 6.84 k/m²)</td>
</tr>
<tr>
<td>Edges</td>
<td>Slightly Tapered</td>
</tr>
<tr>
<td>Flexural Strength, Perpendicular</td>
<td>≥ 62 lbf. (276 N)</td>
</tr>
<tr>
<td>Flexural Strength, Parallel</td>
<td>≥ 21 lbf. (93 N)</td>
</tr>
<tr>
<td>Humidified Deflection</td>
<td>N/A</td>
</tr>
<tr>
<td>Nail Pull Resistance</td>
<td>≥ 46 lbf. (205 N)</td>
</tr>
<tr>
<td>Hardness – Core, Edges and Ends</td>
<td>≈ 11 lbf. (49 N)</td>
</tr>
<tr>
<td>Bending Radius</td>
<td>N/A</td>
</tr>
<tr>
<td>Thermal Resistance</td>
<td>N/A</td>
</tr>
<tr>
<td>Permeance</td>
<td>N/A</td>
</tr>
<tr>
<td>Mold Resistance, ASTM D3273</td>
<td>Score of 10</td>
</tr>
<tr>
<td>Mold Resistance, ASTM G21</td>
<td>Score of 0</td>
</tr>
<tr>
<td>Surface Abrasion</td>
<td>Level 3</td>
</tr>
<tr>
<td>Indentation</td>
<td>N/A</td>
</tr>
<tr>
<td>Soft-Body Impact</td>
<td>N/A</td>
</tr>
<tr>
<td>Hard-Body Impact</td>
<td>N/A</td>
</tr>
<tr>
<td>Product Standard Compliance</td>
<td>ASTM C1396</td>
</tr>
</tbody>
</table>

### Fire-Resistance Characteristics

- Core Type: N/A
- UL Type Designation: N/A
- Combustibility: Non-combustible Core
- Surface Burning Characteristics: Class A
- Flame Spread: 15
- Smoke Development: 0

### Applicable Standards and References

- ASTM C840 Standard Specification for Application and Finishing of Gypsum Board
- ASTM C1396 Standard Specification for Gypsum Board
- ASTM C1629 Standard Classification for Abuse Resistant Nondecorated Interior Gypsum Panel Products and Fiber-Reinforced Cement Panels
- ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials
- ASTM E136 Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C
- ASTM G21 Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi
- Gypsum Association, GA-214, Recommended Levels of Finish for Gypsum Board, Glass Mat and Fiber-Reinforced Gypsum Panels
- Gypsum Association, GA-216, Application and Finishing of Gypsum Panel Products
- Gypsum Association, GA-238, Guidelines for Prevention of Mold Growth on Gypsum Board
- National Gypsum Company, NGC Construction Guide

1. Specified values per ASTM C1396, tested in accordance with ASTM C473.
2. Tested in accordance with ASTM E136.
3. Tested in accordance with ASTM E84.
4. Please consult your local sales representative for all nonstandard lengths and widths. Minimum order requirements may apply.
5. Tested in accordance with ASTM C518.
6. Tested in accordance with ASTM E96.
7. Tested in accordance with ASTM D3273.
8. Tested in accordance with ASTM G21.
Typical Wall Assemblies

Without SoundBreak XP Retrofit®

- **STC – 32** Wood Studs 16” o.c. No insulation.
  NGC2012048

- **STC – 36** Wood Studs 16” o.c. With insulation.
  NGC2012051

- **STC – 33** Wood Studs 24” o.c. No insulation.
  NGC2012064

- **STC – 42** Wood Studs 24” o.c. With insulation.
  NGC2012065

- **STC – 46** Steel Studs 16” o.c. With insulation.
  NGC2013030

- **STC – 47** Steel Studs 24” o.c. With insulation.
  NGC2016104

- **STC – 54** Steel Studs 24” o.c. With insulation.
  NGC2016025

With SoundBreak XP Retrofit®

- **STC – 36** Wood Studs 16” o.c. No insulation.
  NGC2012049

- **STC – 40** Wood Studs 16” o.c. With insulation.
  NGC2012050

- **STC – 39** Wood Studs 24” o.c. No insulation.
  NGC2012067

- **STC – 45** Wood Studs 24” o.c. With insulation.
  NGC2012066

- **STC – 52** Steel Studs 16” o.c. With insulation.
  NGC2013031

- **STC – 53** Steel Studs 24” o.c. With insulation.
  NGC2013041

- **STC – 58** Steel Studs 24” o.c. With insulation.
  NGC2016026
Installation Recommendations

SoundBreak XP Retrofit® Board

- Remove all wall moldings, outlet and switch plates before installing SoundBreak XP Retrofit® Board.
- For optimum performance, install acoustical putty pads on all electrical outlet and switch boxes.
- To install the board, locate framing members and temporarily mark their location on the floor and/or ceiling. Next, apply three 1/2 in. beads of construction adhesive complying with ASTM C557 to the back of SoundBreak XP Retrofit®, parallel to the long edge. Use a 1/4 in. deep notched spreader to evenly distribute construction adhesive.
- Starting in the corner, stand the board up vertically against the wall making sure it is plumb. The PURPLE® face side should be visible to the installer. Secure the board to the framing members with 1-1/2 in. (38.1 mm) drywall screws across the top, middle and bottom of the board. Ensure the board is tight to the existing surface. Additional fasteners may be needed.
- Ensure the gaps around the perimeter of the wall are sealed air tight with latex or acoustical sealant.
- Finish joints and corners with ProForm® BRAND Joint Tape and Compound and spot fastener heads in the same manner as traditional gypsum board.
- After joint compound is dry and sanded, reinstall wall moldings.
- Decorate using conventional primer and paint.
- Reinstalling outlet and switch plates may require the use of box extensions.

General

- Install gypsum board in accordance with methods described in ASTM C840 and GA-216.
- GridMarX® provides quick identification and uniform fastener patterns. Use GridMarX to make accurate cuts without drawing lines. GridMarX guide marks run the length of the board at five points in 4 in. (102 mm) increments. Marks run along the edge in both tapers and at 16 in. (406 mm), 24 in. (610 mm) and 32 in. (813 mm) in the field of the board. The marks cover easily with no bleed-through using standard paint products.
- Locate gypsum board joints at openings so that no joint will occur within 12 in. (305 mm) of the edges of the opening unless installing control joints at these locations.
- Hold SoundBreak XP Retrofit® Board in firm contact with the existing gypsum board wall while driving fasteners. Set fasteners with heads slightly below the surface of the board. Take care to avoid breaking the face paper of the gypsum board. Remove improperly driven fasteners.
- Maintain a room temperature of not less than 50°F (10°C) when using adhesive to attach gypsum board and during joint treatment, texturing and decoration, beginning 48 hours prior to application and continuously thereafter until completely dry. Maintain adequate ventilation in the working area during installation and curing period.
Accessories
Use quality products, such as 1-1/2 in. (38.1 mm) drywall screws, construction adhesive (ASTM C557), latex or acoustical sealant, ProForm® BRAND Joint Tape, ProForm® BRAND Ready Mix or ProForm® BRAND Quick Set™/Quick Set™ Lite Setting Compounds.

Finishing
Joints between SoundBreak XP Retrofit® Board may be finished with either paper tape and ready mix joint compound or fiberglass mesh or paper tape and setting compound, such as ProForm® BRAND Interior Finishing Products.

Decoration
Ensure gypsum board surfaces, including finished joints, are clean, dust-free and gloss-free to achieve best painting results. Apply a coat of a quality drywall primer to equalize the porosities between surface paper and joint compound, improving fastener and joint concealment.

Selection of paint to provide desired finish characteristics is the responsibility of the architect or contractor.

Prepare and prime gypsum boards prior to decoration.

Refer to GA-214 to determine the level of finishing needed to assure a surface properly prepared to accept the desired decoration.

Critical Lighting Areas
Wall and ceiling areas abutting window mullions or skylights, long hallways, and atriums with large surface areas washed with artificial or natural lighting are a few examples of critical lighting areas. Strong side lighting from windows or surface-mounted light fixtures may reveal minor surface imperfections. Light striking the surface obliquely, at a slight angle, exaggerates surface irregularities. If you cannot avoid critical lighting, minimize the effects by skim coating the gypsum board surfaces, by decorating the surface with medium to heavy textures, or by the use of draperies and blinds, which soften shadows. In general, paints with sheen levels other than flat, enamel paints, and dark-toned paint finishes highlight surface defects; consider using textures to hide these minor visual imperfections. Finish boards to a Level 5 finish, as outlined in GA-214.

Limitations
- Do not use on ceilings.
- Doors and windows will reduce the acoustical performance of a partition and may limit the effectiveness of SoundBreak XP Retrofit® Board.
- Not recommended for new construction on bare framing members. Traditional SoundBreak XP Wall™ Board is recommended for this application.
- Avoid exposure to excessive or continuous moisture and extreme temperatures. Do not expose SoundBreak XP Retrofit® to temperatures exceeding 125°F (52°C) for extended periods of time.
- Store SoundBreak XP Retrofit® off the ground and under cover. To prevent sagging, use sufficient risers to ensure support for the entire length of the gypsum board.
- Keep SoundBreak XP Retrofit® dry to minimize the potential for mold growth. Take adequate care while transporting, storing, applying and maintaining SoundBreak XP Retrofit® Gypsum Board. For additional information, refer to the Gypsum Association publication, “Guidelines for Prevention of Mold Growth on Gypsum Board” (GA-238-03), which is available at gypsum.org under the “Download Free Gypsum Association Publications” section.
- Do not use power tools to cut the gypsum board.
LIMITED WARRANTY AND REMEDIES

Products manufactured and sold by National Gypsum Company are warranted by National Gypsum Company to its customers to be free from defects in materials and workmanship at the time of shipment. THIS EXPRESS WARRANTY IS THE ONLY WARRANTY APPLICABLE TO SUCH PRODUCTS, AND IS IN LIEU OF AND EXCLUDES ALL OTHER EXPRESS ORAL OR WRITTEN WARRANTIES AND ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

National Gypsum Company will not be liable for any incidental, indirect or consequential losses, damages or expenses. The customer’s exclusive remedy for any type of claim or action for defective products will be limited to the replacement of the products (in the form originally shipped) or, at National Gypsum’s option, to a payment or credit not greater than the original purchase price of the products.

Mold And Mildew Resistance

SoundBreak XP Retrofit® Gypsum Board was designed to provide extra protection against mold and mildew compared to standard gypsum board products. When tested by an independent laboratory, SoundBreak XP Retrofit® received the highest possible ratings on ASTM G21 and ASTM D3273.

National Gypsum Company will not be liable for products claimed to be defective where the defect resulted from causes not within National Gypsum’s control, or which arose or occurred after shipment, including but not limited to accidents, misuse, mishandling, improper installation, contamination or adulteration by other materials or goods, or abnormal conditions of temperature, moisture, dirt or corrosive matter.

Any claim that products sold by National Gypsum Company were defective or otherwise did not conform to the contract of sale is waived unless the customer submits it in writing to National Gypsum within thirty (30) days from the date the customer discovered or should have discovered the defect or nonconformance. No legal action or proceeding complaining of goods sold by National Gypsum may be brought by the customer more than one year after the date the customer discovered or should have discovered the defect or problem of which it complains.

CUSTOMER SERVICE SALES AREAS

- **Atlantic Area**
  - Phone: (800) 237-9167
  - Fax: (877) 252-0430

- **Central Area**
  - Phone: (800) 252-1065
  - Fax: (866) 232-0440

- **Gulf Area**
  - Phone: (800) 343-4893
  - Fax: (866) 482-8940

- **Midwest Area**
  - Phone: (800) 323-1447
  - Fax: (866) 692-8590

- **Northeast Area**
  - Phone: (800) 253-3161
  - Fax: (866) 632-1480

- **Southeast Area**
  - Phone: (800) 548-9394
  - Fax: (866) 732-1990

- **Southwest Area**
  - Phone: (800) 548-9396
  - Fax: (866) 792-7520

- **Western Area**
  - Phone: (800) 824-4227
  - Fax: (800) 438-6266

- **National Accounts**
  - Phone: (800) 440-1230
  - Fax: (866) 622-3590

- **Factory Built Housing**
  - Phone: (800) 455-3185
  - Fax: (800) 639-1714

The color PURPLE® is a registered trademark of National Gypsum Properties, LLC.

©2018 National Gypsum Company