Georgia-Pacific ForceField®
WEATHER BARRIER SYSTEM

INSTALLATION INSTRUCTIONS

FOR MULTIFAMILY AND LIGHT COMMERCIAL PROJECTS

PRODUCT OVERVIEW

The Smarter Sheathing System for Walls and Sloped Roofs

From weather-related damage to jobsite issues, your multifamily and light commercial construction projects are up against enough challenges that lead to costly delays.

ForceField® Weather Barrier System from Georgia-Pacific delivers a superior level of protection from the elements and gets you dried-in faster. This integrated water-resistive barrier (WRB) sheathing system can be used across your wood-framed multifamily and light commercial structures, from walls to sloped roofs. The system eliminates the need for building wrap or roof underlayment, so there is no tearing or retouching. Also, this versatility helps reduce time spent on scaffolding or in a cherry picker, which may lead to faster, more efficient installation that gets you to the next critical path sooner.

Engineered wood sheathing panels made with DryGuard® Technology* and an enhanced overlay are at the core of this weather barrier system.

ForceField® Panels install like standard oriented strand board (OSB) or plywood sheathing and have the versatility to be used in both wall and sloped roof applications. ForceField® Accessories feature an innovative design and proven compatibility to make critical connections at seams, joints, penetrations, rough openings, and transitions for walls and sloped roofs. When panels are installed, and seams and critical connections are taped, uncontrolled air movement is reduced—which can help improve the structure's energy efficiency.

Whether the system is used on walls or roofs, it helps keep your buildings dry and energy efficient, protecting your investment and reputation during construction and beyond.

Code Compliance

ForceField Weather Barrier System is recognized by the APA - The Engineered Wood Association Product Reports PR-N136 and PR-N136F as a building code-compliant and energy code-compliant structural wood sheathing, roof underlayment, water-resistive barrier and air barrier. The basis of recognition for the ForceField Weather Barrier System to be used as a water-resistive barrier are IBC Section 104.11 and IRC Section R104.11 (alternative materials to the water-resistive barrier requirement defined in IBC Section 1404.2 and IRC Section R703.2). The ForceField Weather Barrier System also serves as a continuous air barrier as prescribed by the 2012 IECC, Section C 402.4 air leakage, for both materials, C 402.4.1.2.1, and assemblies, C402.4.1.2.2, provided the panel seams, rough openings and penetrations are properly treated.

Storage and Handling

To ensure optimum performance, ForceField Panels must be stored and handled properly. Adhering to the following guidelines will help protect panels from damage in storage, during shipment and on the jobsite.

Handling in Transit: Take precautions to protect panel ends and edges during shipment. If ForceField Panels are shipped on an open truck bed, cover them with a tarp. For open railcar shipment, use lumber wrap to keep panels dry and clean.

Storage: Whenever possible, store ForceField Panels under a roof. Use pieces of lumber to weigh down the top panel in a stack and to reduce warpage from humidity. If moisture exposure is expected, cut steel bands on bundles to prevent edge damage. Stack ForceField Panels on a level platform supported by at least three 4x4s to keep them off the ground. Place one 4x4 in the center and the other two 12-16" from the ends. Never leave panels or the platform in direct contact with the ground. Cover the stacks loosely with plastic sheets or tarps. Anchor the covering at the top of the stack but keep it open and away from the sides and bottom to ensure good ventilation. Tight coverings prevent air circulation and when exposed to sunlight, may promote mold or mildew.

ForceField Weather Barrier System Accessories: Store in a cool, dry place out of direct sunlight.

Safety

Follow all OSHA regulations and other safety practices when installing ForceField Weather Barrier System. Wear appropriate safety equipment including, but not limited to, safety helmets, eye protection, cut-resistant gloves, proper footwear, safety belts, harnesses and other fall protection. Do not install in rain, snow, frost or other weather that might result in slippery conditions. Ensure ForceField Panels are clean and dry and all safety measures are in place prior to walking on or working on sloped roofs.

* Features described here may not be available in all geographic markets. Consult your Georgia-Pacific company sales office or representative for more information.

SYSTEM COMPONENTS

ForceField® Seam Tape

A pressure-sensitive polymeric film with an acrylic adhesive for sealing panel seams in ForceField® Weather Barrier System wall application. ForceField Seam Tape tears easily for a quicker install and is ideal for residential construction projects.

Roll Size: 3" wide x 180' long
Thickness: Minimum 0.003"
Packaging: 8 rolls per case

ForceField® Premium Tape

A high-performance self-adhered tape made from a proprietary film with an acrylic adhesive. ForceField Premium Tape offers exceptional durability and tear resistance once installed on a multifamily sloped roof. ForceField Premium Tape can be used to treat joints and seams on the roof and wall, rough openings, penetrations and material transitions.

Roll Size: 3.75" wide x 90' long
Thickness: Minimum 0.0145"
Packaging: 12 rolls per case

ForceField® Flex Tape

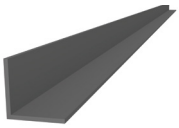
Available in 6" and 9" widths, ForceField Flex Tape is a conformable self-adhered flashing tape ideal for treatment of rough opening sills. It is a two-ply oriented high-density film mated to a premium butyl rubber adhesive and release sheet.

Roll Size: 6" wide x 75' long
9" wide x 75' long
Thickness: Minimum 0.012"
Packaging: 2 rolls per case

ForceField® Corner Seal

An innovative solution from Georgia-Pacific to help protect your home or building against the harmful effects of nature. The product is a 4" wide, semi-rigid polypropylene with a "living hinge," which allows it to be used for both inside and outside exterior corners. Once installed, ForceField Corner Seal helps provide additional protection against air and moisture intrusion in what are typically some of the most difficult areas of a home to seal.

Roll Size: 4" wide x 200' long
Thickness: Minimum 0.03"
Packaging: 1 roll per case



DensDefy® Liquid Flashing

A waterproofing and detailing compound made with silyl terminated polymer (STP) chemistry that seals rough openings, penetrations, and material transitions in new or existing wall assemblies. DensDefy Liquid Flashing creates a highly durable elastomeric flashing membrane.

Packaging: Available in a 20 oz. sausage for professional gun application

DensDefy® Transition Membrane

A 25-mil composite impermeable membrane that is comprised of 16 mils of butyl adhesive and 9 mils of high-density polypropylene (HDPP) facer. It is primarily used as a transitioning accessory between dissimilar materials and where its larger width makes for a more efficient installation.

Roll Size: 6" wide x 75' long
Packaging: 8 rolls per case

Roll Size: 9" wide x 75' long
12" wide x 75' long;
Packaging: 4 rolls per case

Available as individual rolls on Amazon.

WALL INSTALLATION

For detailed instructions on general wall sheathing panel installation, please refer to the APA Engineered Wood Construction Guide, Form No. E30, available in the publication section of apawood.org. For additional information on nail spacing and wall bracing in high-wind or seismic loading areas, refer to Table 23 of the guide. Inspect panels for damage prior to installation.

Tools: Tape measure, cutting tool (knife), saw, straight edge, chalk line, J-roller, hammer, pneumatic nail gun and air line regulators, flush drive adaptors for nail guns, air compressor, speed square, sausage gun.

Installing the Panels on Walls

1. Align the wall panels either vertically or horizontally with the framing so the gray or ivory overlay side of the ForceField® Panels faces out. Spacing of 1/8" between the panels should be maintained at all edges and end joints.

2. Fasten panels according to project specifications and local building code requirements. General fastening guidelines for wood sheathing are to use a minimum 6d common nail spaced 6" o.c. along panel edges and 12" o.c. at intermediate supports. If pneumatic nail guns are used, be sure to set air pressure to drive nail heads flush.

   If your pneumatic tool does not have an adjustment for fastener depth, flush drive attachments are recommended. Guidelines are included on the panel surface to aid in locating supports for nailing.

Note:
As a best practice, field cut edges should be taped as soon as possible after installation.

Alternate method:
For use on panels up to 1/2" in thickness—use 15-gauge staples spaced 4" along panel edges and 8" at intermediate supports, or 16-gauge staples spaced 3" along panel edges and 6" at intermediate supports driven flush with panel surface.

Taping the Wall Panel Seams

An approved tape from Georgia-Pacific must be used to treat the seams between wall sheathing panels. Substitutions are not covered by the warranty.

Installation:

1. Ensure the surface is free from moisture, frost, dust, dirt and other bond-inhibiting materials. Center the tape over the panel seam so that a minimum 1" of tape is applied on each side of the panel seam.

2. Apply firm pressure on the ForceField® Tape with your hand to ensure that a continuous bond is achieved between the tape and the panel surface and to eliminate wrinkles and air bubbles. As a best practice, use a J-roller to roll over the tape after hand application.

   Whenever tape splices occur, a minimum 2" overlap should be used. Sequence tape application such that a shingle lap application is achieved. At T-joints, the tape should overlap by at least 2".

WALL INSTALLATION

ForceField® Corner Seal Installation

1. Unspool material and cut to a length that is manageable for the installation. Where applicable, overlap the corner seal pieces a minimum of 2" in a shingle lap application. Apply a 6" piece of ForceField® Premium Tape over the splice.
2. Bend the corner seal appropriately to form an inside or outside corner.
3. Align corner seal 1"-2" from the top of the wall.
4. Secure corner seal using nails, brad nails or staples at 3' intervals down the length of the piece a maximum 1" from outside edge.
5. Cut the corner seal into manageable lengths. Do not install corner seal across drift joints and expansion joints or where movement is anticipated.
6. Treat bottom with another 6" piece of ForceField Premium Tape 1"-2" from bottom.
7. Center ForceField Premium Tape over one edge of the corner seal. The tape should overlap onto the panel a minimum of 1".
8. Apply firm pressure on the ForceField Premium Tape with your hand to ensure that a continuous bond is achieved between the tape and the panel surface and to eliminate wrinkles and air bubbles. As a best practice, use a J-roller to roll over the tape after hand application.
9. Repeat steps 6–8 for the other edge of the corner seal.
10. Apply a 6" piece of ForceField Premium Tape across the top of the corner seal.

WALL INSTALLATION

Flashing Tapes for Treating Windows, Doors, Penetrations and Transitions

An approved ForceField® Tape must be used around rough openings, penetrations and material transitions. DensDefy® Liquid Flashing is also approved for use to treat penetrations, transitions and rough openings of ForceField® Weather Barrier System. See additional information on DensDefy Liquid Flashing at BuildGP.com. Always be sure to follow local building code requirements. When applying tapes, use a J-roller to eliminate wrinkles and air bubbles and ensure a continuous bond is achieved between the tape and panel surface.

Always be sure to follow applicable local building code requirements and industry best practices. All figures and illustrations contained in these instructions are representative of typical flashing installations, but are not intended to address all possible construction scenarios.

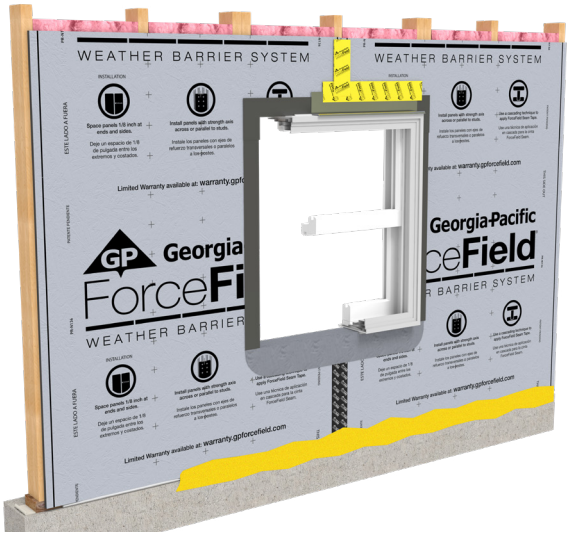
Window Rough Opening Treatment with ForceField® Flex Tape

1. Ensure the surface is free from moisture, frost, dust, dirt and other bond-inhibiting materials.
2. Measure the length of the sill and add 12" to accommodate for turning up both jambs approximately 6".
3. Cut appropriate length of ForceField Flex Tape with a sharp knife.
4. Position the tape inside the rough opening over the sill; starting at one side, peel and fold half of the release liner back and press into place.
5. Remove the remaining liner; starting at the corners, stretch flashing out and onto the face of the panel and up the jamb. Then pull the flashing down onto the face of the panel at the sill. Ensure a minimum 2" of flashing extends onto the panel surface.
6. Apply firm pressure using a J-roller to ensure that a continuous bond is achieved between the flashing and the surface and to eliminate wrinkles and air bubbles.
7. Cut two 4" pieces of ForceField® Premium Tape and position into each head-jamb corner.

   Cut two additional pieces of ForceField Premium Tape for the jambs long enough so the tape extends over the ForceField Flex Tape and past the header approximately 2".

   Position ForceField Premium Tape over ForceField Flex Tape, wrapping into the rough opening and onto the panel surface a minimum of 2".
8. Measure the header length and add 4"-5" to accommodate for overlapping the jamb flashing. Remove release liner and install so that it shingle laps over the jamb flashing. Ensure a minimum 2" of flashing extends onto the panel surface and into the rough opening.
9. Roll over all of the flashing tapes with a J-roller, applying firm pressure to ensure that a continuous bond is achieved between the tape and the panel surface and to eliminate wrinkles and air bubbles.

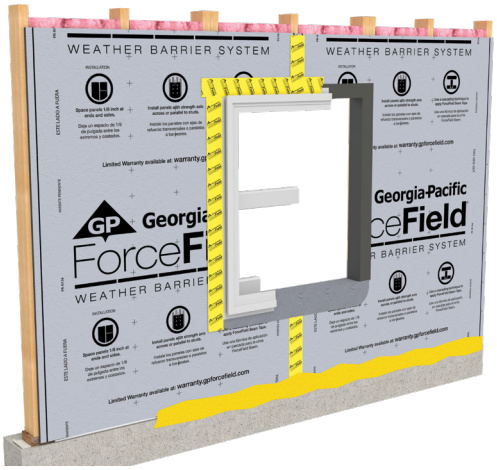
   Note: A separate head flashing should be installed over non-flanged windows; refer to project specification for type and configuration of head flashing and follow all applicable building code requirements.



WALL INSTALLATION

Optional for flanged windows:

10. Install ForceField® Premium Tape or DensDefy® Liquid Flashing over the jamb and head flanges in a shingle type application, but do not apply flashing tape over the sill flange. Consult window manufacturer for installation requirements and guidelines.



Rough Opening Treatment with DensDefy Liquid Flashing

1. Rasp any jagged or uneven ForceField® Panel edges and clean framing free of debris and dust or other bond-inhibiting materials.

2. Apply a bead of DensDefy Liquid Flashing into all inside corners of the opening.

3. Apply DensDefy Liquid Flashing in the opening sill, jamb and header in a zig-zag or ribbon pattern.

4. Apply DensDefy Liquid Flashing over the face of ForceField Panel adjacent to the opening sill, jamb and header in a zig-zag or ribbon pattern.

5. Use a straight-edge tool to spread the DensDefy Liquid Flashing to a pinhole- and void-free application achieving a minimum 16 wet mils.

6. Spread the DensDefy Liquid Flashing a minimum of 2" into the rough opening and a minimum 1" past the interior air seal of the window unit. Refer to the project details and specifications to determine window placement and minimum requirement for rough opening treatment.

7. Ensure a minimum 2" of DensDefy Liquid Flashing is applied onto the sheathing surface adjacent to the opening.

Door Rough Opening Treatment

1. Ensure the surface is free from moisture, frost, dust, dirt and other bond-inhibiting materials.

2. Measure the length of the jamb and add 2", cut two pieces of ForceField Premium Tape to length and position over the jamb so that it extends past the header approximately 2" and extends onto the face of the panel surface a minimum 2".

3. Cut a piece of ForceField Premium Tape for the header long enough that it extends over and past the jamb flashing. Position over the jamb flashing tape in a shingle type application. Ensure a minimum 2" of overlap onto the panel surface is achieved.

4. At the sill, apply DensDefy Liquid Flashing over the jamb flashing tape and onto the floor; extend over the face of the panel a minimum 2".

5. Apply at a rate to achieve a minimum thickness of 16 wet mils over the opening area with no pinholes or voids.

Note:
A separate head flashing should be installed over non-flanged doors; refer to project specification for type and configuration of head flashing and follow all applicable building code requirements.

Optional for Flanged Doors:
Install flashing tape or DensDefy Liquid Flashing over the jamb and head flanges in a shingle type application. Consult door manufacturer for installation requirements and guidelines.

WALL INSTALLATION

Treatment of Material Transitions Using ForceField® Premium Tape

1. Ensure the surface is free from moisture, frost, dust, dirt and other bond-inhibiting materials.

   Provide a minimum 1/2" gap between ForceField® Panel and masonry. Fill gaps between substrates with a backer rod to support the tape.

2. Remove the backing and center ForceField Premium Tape over the joint and press firmly into place. Ensure minimum 2" of flashing tape is on each substrate material surface.

3. Overlap a minimum 2" at all end laps of flashing. For vertical transitions, overlap tapes in a shingle type application.

4. Apply firm pressure using a J-roller to ensure that a continuous bond is achieved between the flashing and the surface and to eliminate wrinkles and air bubbles.

Treatment of Material Transitions Using DensDefy® Liquid Flashing

1. Before the application of DensDefy Liquid Flashing, ensure that the panel and adjacent surface is free from moisture, frost, dust, dirt and other bond-inhibiting materials.

2. Provide a minimum 1/2" gap between ForceField® Panel and masonry. Fill gaps between substrates with a backer rod.

3. Apply DensDefy Liquid Flashing over the ForceField Panel and adjacent material in a zig-zag or ribbon pattern.

4. Using a straight-edge tool, spread DensDefy Liquid Flashing over material transition joint.

5. Apply at a rate to achieve a minimum thickness of 16 wet mils. Ensure the flashing is applied a minimum of 2" on each substrate material surface.

Installing Wall Cladding Over ForceField® Panels

Conventional exterior claddings—including, but not limited to, wood, vinyl, metal or cement composition, stone, brick, or mechanically attached exterior insulation & finish system (EIFS)—may be applied over ForceField Panels. For claddings that utilize metal lath such as stucco or stone, install a vapor-permeable, water-resistive barrier equal to the performance of Grade D paper over ForceField Panels before applying metal lath. For brick, prevent mortar droppings from coming in permanent contact with ForceField Panels and maintain a minimum 2" air gap between ForceField Panels and the brick veneer. Refer to cladding manufacturer's instructions for additional guidance.

WALL INSTALLATION

Treatment of Penetrations Using ForceField® Premium Tape

1. Ensure that the panel and penetration are mechanically secured and free from moisture, frost, dust, dirt and other bond-inhibiting materials.

   If necessary, fill transition gap between the two different substrates with a backer rod if gap is over 1/8" wide to support the tape at the transition joint.

2. Align and position the tape so that a minimum 2" of flashing tape is adhered to each surface.

3. Overlap a minimum 2" at all end laps of tape. For vertical transitions, overlap tapes in a shingle type application.

4. Apply firm pressure using a J-roller to ensure that a continuous bond is achieved between the tape and the surface and to eliminate wrinkles and air bubbles.

Treatment of Penetrations Using DensDefy® Liquid Flashing

1. Before the application of DensDefy Liquid Flashing, ensure that the panel and adjacent surface is mechanically secured and free from moisture, frost, dust, dirt and other bond-inhibiting materials.

2. If the gap between materials is over 1/4", fill the gap between the ForceField® Panel and adjacent materials with a backer rod.

3. Apply DensDefy Liquid Flashing over the ForceField Panel and adjacent material in a zig-zag or ribbon pattern.

4. Using a straight-edge tool, spread DensDefy Liquid Flashing over material transition joint.

5. Apply at a rate to achieve a minimum thickness of 16 wet mils. Ensure the flashing is applied a minimum of 2" on each substrate material surface.

WALL INSTALLATION

Use of ForceField® Weather Barrier System on Fire-Rated Exterior Walls

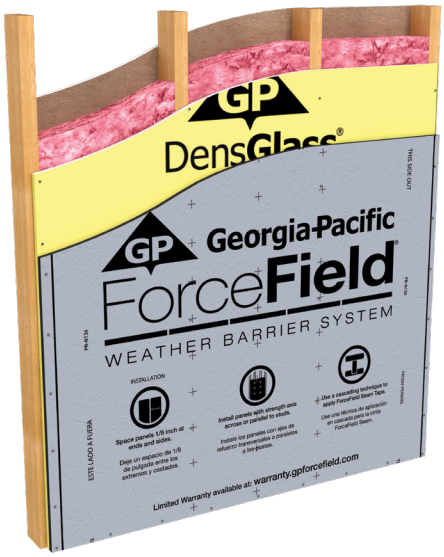
It is common to install gypsum sheathing in combination with wood structural sheathing when building code calls for walls to be fire rated from the exterior in Type V construction. Comply with building code to achieve both the required rating and meet the water-resistive barrier code requirement when using ForceField Weather Barrier System.

1. Attach appropriate layer(s) of 5/8" Type X DensGlass® Sheathing (Type DGG) as outlined in UL Designs U330, U364, U377, and U354.*

2. Attach ForceField® Panels over the DensGlass Sheathing and into the framing with the appropriate fasteners and spacing.

3. Seal the ForceField Panel seams, penetrations, openings and material transitions as outlined in the ForceField Weather Barrier System installation guide to provide the air- and water-resistive barrier prior to installing the cladding.

ForceField Weather Barrier System complies with DOC PS2 and, per UL BXUV Guidelines for Fire-Resistance Ratings (ANSI/UL 263, Section VI Walls and Partitions, Item 6) and General Explanatory Note #25 of the GA600, may be applied either vertically or horizontally to framing members.



*Please consult the actual fire resistance directory or test report for complete information. Ultimately, the design and detailing of the project, assembly or system is the responsibility of a professional, and all projects must comply with applicable building codes and standards.

FIRE SAFETY CAUTION – Passing a fire test in a controlled laboratory setting and/or certifying or labeling a product as having a one-hour or other fire resistance rating and, therefore, as acceptable for use in certain fire-rated assemblies, does not mean that either a particular assembly incorporating the product, or the product itself, will necessarily provide one-hour or other specified fire resistance 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. Please visit BuildGP.com/SafetyInfo for additional information.

SLOPED ROOF INSTALLATION

In roofing system applications, ForceField® Weather Barrier System must be installed per the roofing system manufacturer's instructions, project technical documentation and local codes. ForceField® Panels are intended for roofs with 2/12 pitch or greater and to replace the first layer of the underlayment required by the International Building Code (IBC) section 1507.1.1. ForceField Panels are not intended to replace the interlayment of a roofing system, or serve as an ice barrier.

Installing the Panels on Sloped Roofs

1. When installing the ForceField Panels on the roof, orient the panel so the gray or cream weather barrier side faces out and long direction (8') is perpendicular to the roof trusses or rafters and spans a minimum of three supports. The short edge (4') of the panel should be centered over a framing member and staggered a minimum of 24" from the adjacent panels.

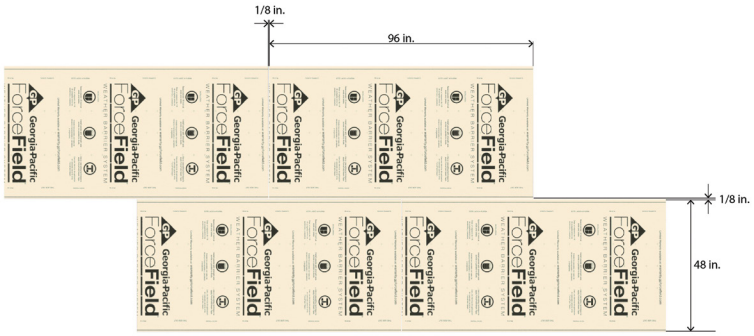
2. Spacing of 1/8" between the panels should be maintained at all edges and end joints.

3. ForceField Panels shall be attached to the roof trusses or rafters per the project specifications or local codes and must meet the following minimum requirements.

   Use a minimum of 8d common nail spaced 6" o.c. along panel edges and 12" o.c. at intermediate supports. Fasteners must be placed a minimum of 3/8" from all panel edges.

   If pneumatic nail guns are used, be sure to set the air pressure to drive the nail heads flush or a maximum of 1/16" below the panel surface.

Note:
Unsupported 7/16" ForceField Panels spanning more than 16" require panel edges blocked or H-clips installed midway between the roof trusses or rafters. Maximum allowable load of the roof for the given truss or rafter spacing does not increase by using edge supports.



Taping the Roof Panel Seams

ForceField Premium Tape must be used to treat seams between the roofing panels. Substitutions are not covered under Georgia-Pacific's limited warranty. For best performance results, immediate sealing of joints and seams with tape is required. Before the application of tape, ensure that the roofing panel surfaces are free from moisture, frost, dust, dirt and other bond-inhibiting materials.

1. Center the ForceField® Premium Tape over the roof panel seam.

2. Apply firm pressure on the ForceField Premium Tape with your hand to ensure that a continuous bond is achieved between the tape and the panel surface and to eliminate wrinkles and air bubbles. As a best practice, use a J-roller to roll over the tape after hand application.

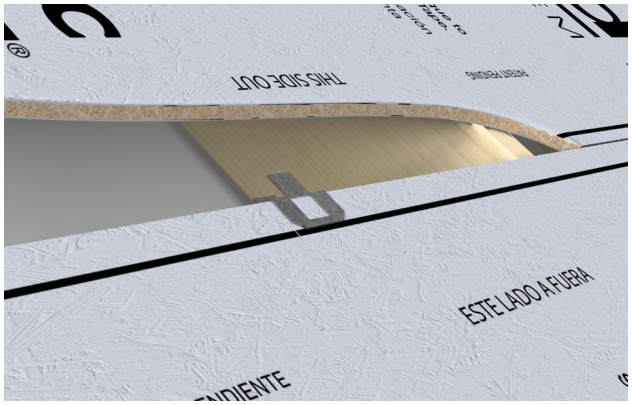
3. Wherever tape splices occur, a 2" overlap should be used. Sequence tape application such that a shingle lap application is achieved. At T-joints, the tape should overlap by 2".

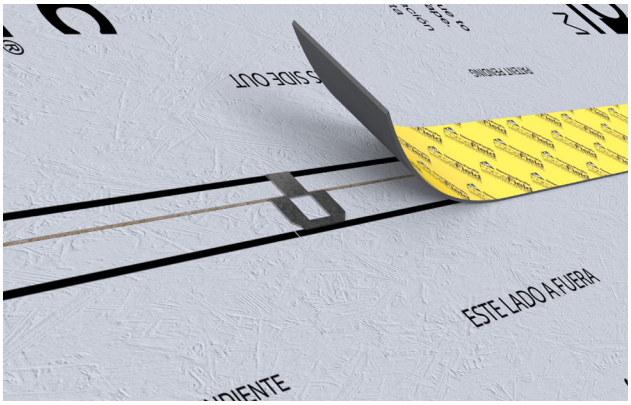
SLOPED ROOF INSTALLATION

Taping of Common Roofing Conditions

Installed H-Clips:

1. H-clips must be taped using ForceField® Premium Tape. Center the tape over the H-clip to ensure it is covered; apply adequate pressure on all sides of the clip using your hand or a J-roller.

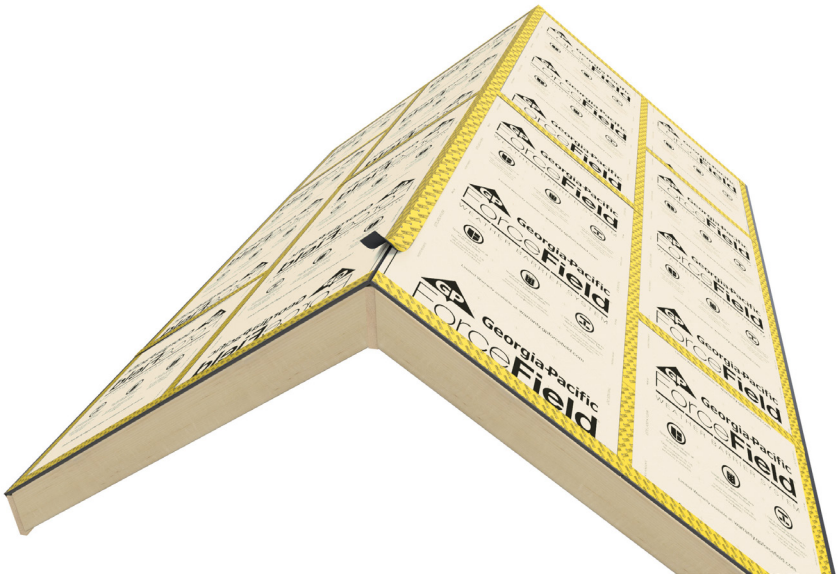




Ridge Roof Systems:

1. Center the ForceField Premium Tape over the ridge seam.
2. Apply firm pressure on the tape surface with your hand or a J-roller to ensure that a continuous bond is achieved between the tape and the panel surface and to eliminate wrinkles and air bubbles.

Note:
The tape on the ridge is for temporary moisture protection. Prior to installing the ridge vent, the ridge tape must be cut to allow for proper ventilation.



SLOPED ROOF INSTALLATION

Roof-to-Wall Transition:

1. Center the ForceField® Premium Tape over the joint/transition between the wall and roof panels.
2. Install metal flashing at the roof-to-wall transition per project design or local building code.
3. Apply ForceField Premium Tape to the top edge of the installed metal flashing and onto the wall panel. The applied tape should cover all flush-driven fasteners used to attach the flashing and a minimum of 2" onto the panel face. If more than one piece of tape is needed to achieve proper coverage, a shingle lap application of the tape must be used.
4. Apply firm pressure on the tape surface with your hand or a J-roller to ensure that a continuous bond is achieved between the tape and the surfaces and to eliminate wrinkles and air bubbles.
5. Finish by applying ForceField Premium Tape to the bottom edge of the metal flashing and onto the ForceField Panel covering all flush-driven fasteners used to attach the metal flashing and by maintaining a minimum of 2" onto the face of the roofing panel.
6. Apply firm pressure on the tape surface with your hand or a J-roller to ensure that a continuous bond is achieved between the tape and the surfaces and to eliminate wrinkles and air bubbles.

Valley with Flashing:

1. Using ForceField Premium Tape, center the tape over the valley seam where the roof panels join.
2. Apply firm pressure on the tape surface with your hand or a J-roller to ensure that a continuous bond is achieved between the tape and the panel surface and to eliminate wrinkles and air bubbles.
3. Install metal flashing over the installed ForceField Premium Tape per the project technical documentation, local building code and the manufacturer's instructions.
4. Apply ForceField Premium Tape over the edges of the installed metal flashing a minimum of 2" onto the flashing and roof panel face. If fasteners were used to secure or attach the flashing, the installed tape must cover all flush-driven fasteners. If more than one piece of tape is needed to achieve proper coverage and to cover flush-driven fasteners, a shingle lap application of the tape must be used.
5. Apply firm pressure on the tape surface with your hand or a J-roller to ensure that a continuous bond is achieved between the tape and surfaces and to eliminate wrinkles and air bubbles.

* These renderings are for illustration purposes only and not intended for design purposes.

SYSTEM LIMITATIONS

The following recommendations and limitations are important to ensure the proper use and benefits of ForceField® Weather Barrier System. Failure to adhere to such recommendations and limitations may void the limited warranty provided by Georgia-Pacific Building Products for such products. For details of the limited warranty for ForceField Weather Barrier System, please go to Warranty.GPForceField.com.

- Unsupported 7/16" ForceField® Panels spanning more than 16" require panel edges blocked or H-clips installed midway between the roof trusses or rafters. The use of H-clips or edge blocking does not increase the maximum allowable loads of the roof.
- ForceField Panels are intended for roofs with 2/12 pitch or greater.
- Do not use abutted to general stone or masonry without providing a minimum of a ½" gap.
- Do not install ForceField Weather Barrier System or accessories in temperatures less than 20°F or if frost or ice is present on the panel surface.
- Where multiple layers of a water-resistive barrier or underlayment are needed, ForceField Weather Barrier System is intended to replace only the first layer.
- ForceField Weather Barrier System is not an ice barrier. Where ice barriers are required, the ice barrier should be installed over the ForceField Weather Barrier System.
- DensDefy® Liquid Flashing, DensDefy® Transition Membrane and ForceField® Tapes are not recognized as a replacement for rigid, metal or other through-wall flashings prescribed by others.
- ForceField Weather Barrier System is resistant to normal weather conditions. It is not intended for use as a finished roof covering or cladding system, or for long-term outdoor exposure or immersion in water or cascading water from an unfinished roof or floor. Water should always be directed away from ForceField Weather Barrier System.
- Avoid conditions that will create moisture in the air and condensation within the exterior walls or roof supports. This precaution is especially important during periods when the exterior and interior temperature differentials can create a condensation point within the exterior wall. The use of forced air heaters creates volumes of water which, when not properly vented, can condense on building materials. The use of heaters and any resulting damage is not the responsibility of Georgia-Pacific Building Products. Consult heater manufacturer for proper use and ventilation.
- Do not use solvent-based cleaning products or other materials such as membranes that contain solvents.
- For above-grade dimension and hardscape, use language from FFTG.
- Don't move or resituate tape after initial placement.
- Georgia-Pacific Building Products does not warrant and is not responsible or liable for the performance of any cladding or cladding system, membrane, sealant or accessory that is attached or adhered to ForceField Weather Barrier System. The performance and compatibility of any cladding system is the responsibility of the cladding manufacturer or design authority.
- Do not attach cement board panels directly to ForceField Panels.
- ForceField Weather Barrier System is not intended for interior applications or as a substrate for adhered exterior tile, stone, EIFS or brick.
- Panel fasteners shall be driven into framing and shall be flush with the face, not countersunk.
- Exterior wall or roof assembly design details including, but not limited to, cladding attachments, control joints, material transition details, window and door integration, per the project specification, must be properly installed.
- Joints, openings, transitions and penetrations must be properly sealed, taped or flashed. Failure to do so may void the warranty.
- ForceField Panels should not be glued to framing members or roofing supports.
- Do not install ForceField Panels on a horizontal surface; ensure panels are installed with sufficient positive slope to prevent ponding and pooling of water.
- Do not install ForceField Weather Barrier System below grade.
- All damage to the facer and vacated fastener holes must be repaired prior to installing the cladding or roofing system.
- When re-roofing or replacing the roof or cladding system on an installed ForceField Weather Barrier System, an additional weather-resistant barrier or underlayment must be installed prior to installing the new roof assembly.
- Do not use DensDefy® Liquid Flashing as a structural sealant.
- DensDefy Liquid Flashing should not be used as a through-wall flashing.
- DensDefy Liquid Flashing application temperature above 25°F (-4°C) and rising.
- Prevent mortar droppings from coming in permanent contact with ForceField Panels and maintain a minimum 2" air gap between the ForceField Panels and brick or masonry veneer.
- For a full list of DensDefy™ Accessory limitations, refer to product bulletins on DensElement.com.

Georgia-Pacific
ForceField®
WEATHER BARRIER SYSTEM

GP Building Products
133 Peachtree Street, N.E. | Atlanta, Georgia 30303

TECHNICAL HOTLINE
U.S.A. and Canada: 800-225-6119

PRECAUTIONS – For product fire, safety and use information, go to BuildGP.com/SafetyInfo or call 800-225-6119.

WARRANTIES AND TERMS OF SALE –
For current warranty information, please go to Warranty.GPForceField.com.
All sales by Georgia-Pacific are subject to our Terms of Sale available at BuildGP.com/TC.

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