



Storm Bond™

ROOF TILE ADHESIVE

Application Instructions

Important: For professional use only! Read all enclosed instructions and cautions carefully prior to use!

Always wear personal protective equipment — refer to the enclosed “Safe Use, Storage and Handling” guide for detailed recommendations.

Storm Bond™ is temperature sensitive! Failure to follow procedures and temperature guidelines may result in poor performance and may affect foam quality.

Touch 'n Seal® Storm Bond Roof Tile Adhesive polyurethane foam from Convenience Products is designed for professional use with approved flat, low, medium and high profile tile systems.

Section 1: Preparation and Set-Up

Application area should be clean, dry, free of oil, grease, debris and well ventilated. Check expiration date on carton to ensure product is current. Chemical contents must be brought to a temperature between 70°–90°F (21°–32°C) before and during use. Depending upon environmental conditions, this could take 36 to 72 hours at room temperature. Application in higher or lower temperatures may alter set-up time, cure time, yield, and reduce overall adhesive performance.

23# Cylinder

1. For best results, ensure that chemical, ambient and substrate temperatures are 70°–90°F (21°–32°C) before and during use.
2. Remove cylinder, instructions and accessories from carton. Read instructions.
3. Attach hose to bottom of foam adhesive applicator. Attach applicator hose assembly to cylinder. Tighten with wrench. Refer to Drawing 12.
4. Do not pull/lift adhesive cylinder by hose. Always dispense Storm Bond with chemical cylinder in an upright position.

24 oz. Aerosol Can

1. For best results, ensure that chemical, ambient and substrate temperatures are 70°–90°F (21°–32°C) before and during use.
2. Read instructions.
3. Remove aerosol can cap
4. Attach straw to trigger adaptor.
5. Screw adaptor onto can valve.

Section 2: Application

23# Cylinder

1. Shake cylinder for 30 seconds.
2. Fully open the valve on tank counterclockwise until resistance is felt.
3. Purge air from the chemical hose by aiming the Storm Bond applicator into a waste receptacle and activating the applicator trigger.
4. Adjust output rate by turning the brass knurl towards the front of the applicator to increase output or back towards the handle of the applicator to reduce the flow rate.
5. Press trigger to test adhesive flow rate on scrap material first.
6. Hold cylinder upright by hand or store/position upright behind a stack of tile.
7. Depress applicator trigger and apply Storm Bond adhesive according to the patterns and bead weights shown in the attached drawings.
8. All tiles must be set in adhesive within 4 minutes of adhesive application.

24 oz. Aerosol Can

1. Shake aerosol can vigorously for 30 seconds.
2. Invert can and activate trigger to test adhesive flow rate on scrap material first.
3. Holding aerosol can upside down, depress applicator trigger and apply Storm Bond adhesive according to the patterns and bead weights shown in the drawings herein.
4. All tiles must be set in adhesive within 4 minutes of adhesive application.

Section 3: Clean-Up

If Storm Bond has not cured (it is still moist), it may be removed by wiping off with a dry cloth, or by using Touch 'n Seal polyurethane foam cleaner. Acetone or nail polish remover containing acetone will also work. Do not use soap and water as moisture helps to cure Storm Bond. No solvent will remove cured (dry) Storm Bond. Cured Storm Bond is not harmful to health and will wear off naturally over time. A pumice stone with warm, soapy water may be used to gently scrape dried Storm Bond from skin. You may also apply petroleum jelly to area,

cover with a plastic glove, wait about an hour, rub off with an old cloth and then wash area with soap and water.

Section 4: Storage

Store product in a clean, dry area in temperatures between 60°–120°F (16°–49°C). REFER TO THE ENCLOSED SAFE USE, STORAGE AND HANDLING GUIDE FOR DETAILED RECOMMENDATIONS.

Section 5: Troubleshooting

If Storm Bond quality is suspect at any time during dispensing, discontinue application and check the following:

1. Verify that the chemical, ambient and substrate temperatures are within the specified range.
2. Ensure the cylinder valve is fully open and the applicator tip is not obstructed.
3. Ensure chemical hose is not kinked.
4. Ensure chemical cylinders are upright and that aerosol cans are upside down during dispensing.

For additional assistance, contact your Convenience Products Sales Representative or call Convenience Products Customer Service at (800) 325-6180 or (636) 349-5333.

Section 6: Cautions

LIMITATIONS AND RECOMMENDATIONS

Contact Area — For specific square inch contact area for tile to underlayment and tile to tile, refer to pages 9–12.

Applicator Qualification — Storm Bond applicators must pass the required Qualified Applicator Course.

Contact Area Confirmation — Once square inch contact area has been obtained, check at least one tile per square to confirm contact area. Do not place Storm Bond Roof Tile Adhesive on fresh plastic cement.

Exposure Limitations — Storm Bond Roof Tile Adhesive must not be left exposed to direct sunlight. After adhesive cures (approximately 1–2 hours) point up with mortar or coat any exposed adhesive with an elastomeric coating.

Setting Tiles — All tiles must be set in adhesive within 4 minutes of adhesive application. Under normal weather conditions, maximum bond strength will be obtained within 24 hours.

Building Codes/Permits — Consult local building codes prior to use.

Surface Temperatures — Do not use Storm Bond Roof Tile Adhesive in direct contact with chimneys, heat vents, steam pipes, or other surface areas that exceed 240°F (116°C).

Open Flame — Storm Bond propellant is non-flammable. However, Storm Bond adhesive is combustible.

Section 7: Safety Precautions

Whenever Storm Bond Roof Tile Adhesive is being applied, personal protective equipment should be used, including safety glasses, chemical resistant gloves, aprons or coveralls, footwear, chemical protective jackets and/or pants. Use only in a well-ventilated area.

Avoid contact with eyes and skin. Skin contact with Storm Bond may cause irritation or sensitization.

KEEP OUT OF REACH OF CHILDREN

Refer to the enclosed SAFE USE, STORAGE AND HANDLING guide for detailed safety precautions.

Limited Warranty

Convenience Products warrants this product to be free from defects. The Company shall not be liable for any consequential or other damage or remedy; its sole obligation and your exclusive remedy are limited to product replacement. Warranty is null and void if unit is operated without attaching a new spray foam applicator gun/hose set. Some states do not allow limitations on the exclusive or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which may vary from state to state. There are no warranties which extend beyond the description on the face hereof.

Emergency Telephone Number: Call ChemTel, Inc. within US 1 (888) 255-3924;
Outside US 01 (813) 248-0573.

For All Concrete and Clay Tile Application: Low/Flat Profile, Low/Medium Profile, High Profile, Two-Piece Barrel Profile

For areas and sections of the Roof System not covered by these instructions, please refer to the FRSA/TRI Concrete and Clay Roof Tile Installation Manual.

1. For pitches above 6:12 up to and including 7:12, nail every third (3rd) tile in every fifth (5th) course in addition to the adhesive. Horizontal batten strips may need to be installed, depending upon the roof pitch and other attributes of the roof.
2. For pitches above 7:12, nail every tile in addition to adhesive, or use horizontal batten strips in addition to the adhesive.
3. Check local building code for additional nailing requirements.

Aplicación de teja de perfil bajo/plano, bajo/mediano, alto, tipo barril de dos piezas

Para zonas y secciones del Sistema de techos no cubiertas por estas instrucciones, por favor consulte el Manual de Instalación de Tejas de Cemento y Cerámica para Techo de la FRSA/TRI.

1. Para pendientes de más de 6:12 hasta e incluyendo 7:12, clave cada tercera teja en cada quinta hilera, además de usar el adhesivo. Podría ser necesario usar listones horizontales, dependiendo de la pendiente del techo y otras características del techo.
2. Para pendientes de más de 7:12, clave cada teja además de usar el adhesivo, o use listones horizontales además del adhesivo.
3. Consulte con el Código de Construcciones local si hubiera más requisitos de clavos.

NOTE: Bead dimensions and placement can be modified to accommodate differences in tile configurations as long as the adhesive contact area is not reduced. Check at least one tile per square before adhesive cures to confirm contact area. To make any adjustments to tiles after tack free time, you must have old adhesive beads removed and new adhesive beads applied. Walking on the tile before adhesive has cured may cause a slipping hazard.

NOTA: Las dimensiones y colocación del cordón pueden modificarse para ajustar a diferencias en la configuración de las tejas, siempre que no se reduzca la zona de contacto del adhesivo. Controle al menos una teja por cuadrado antes de que cure el adhesivo para confirmar la zona de contacto. Para hacer cualquier ajuste a las tejas luego de que el adhesivo está seco al tacto, debe remover los cordones antiguos de adhesivo y aplicar otros nuevos. Caminar sobre la teja antes de que haya curado el adhesivo puede provocar el peligro de resbalarse.

FIELD TILE INSTALLATION				
TILE TYPE		INSTALLATION DRAWING NUMBER	UNDERLOCK ADHESIVE BEAD SIZE	HEAD LAP ADHESIVE BEAD SIZE
CONCRETE TILES	FLAT/LOW PROFILE	1	1-1/4" wide by 10" long	1-1/4" by 8" long
	LOW/ MEDIUM PROFILE	2	1-1/4" wide by 10" long	3/4" wide by 10" long
	HIGH PROFILE	3	1-1/4" wide by 10" long	3/4" wide by 10" long
CLAY TILES	FLAT PROFILE	4	3/4" wide by 10" long	1/2" wide by 8" long
	LOW PROFILE	5	3/4" wide by 10" long	1/2" wide by 8" long
	HIGH PROFILE, S-TILE	6	3/4" wide by 10" long	1/2" wide by 8" long
	HIGH PROFILE, BARREL TILE	7	3/4" wide by 15" long	N/A

EAVE TILE INSTALLATION		
TILE TYPE		INSTALLATION DRAWING NUMBER
CONCRETE TILES	FLAT/LOW PROFILE	1
	LOW/ MEDIUM PROFILE	2
	HIGH PROFILE	3
CLAY TILES	FLAT PROFILE	4 or 5
	LOW PROFILE	4 or 5
	HIGH PROFILE, S-TILE	6
	HIGH PROFILE, BARREL TILE	7

HIP AND RIDGE TILE INSTALLATION*				
TILE TYPE		INSTALLATION DRAWING NUMBER	RIDGE BOARD ADHESIVE BEAD SIZE	HEAD LAP ADHESIVE BEAD SIZE
CONCRETE	FLAT/LOW PROFILE	10,11	1-1/2" wide by 1-1/2" high by 12" long (minimum)	1 wide by 1" high by 4" long (minimum)
	LOW/ MEDIUM PROFILE	10,11	1-1/2" wide by 1-1/2" high by 12" long (minimum)	1" wide by 1" high by 4" long (minimum)
	HIGH PROFILE	8 & 9	1-1/2" wide by 1-1/2" high by 12" long (minimum)	1" wide by 1" high by 4" long (minimum)
CLAY	FLAT PROFILE	10,11	1-1/2" wide by 1-1/2" high by 12" long (minimum)	1" wide by 1" high by 4" long (minimum)
	LOW PROFILE	8 & 9	1-1/2" wide by 1-1/2" high by 12" long (minimum)	1" wide by 1" high by 4" long (minimum)
	HIGH PROFILE, S-TILE	8 & 9	1-1/2" wide by 1-1/2" high by 12" long (minimum)	1" wide by 1" high by 4" long (minimum)
	HIGH PROFILE, BARREL TILE	8 & 9	1-1/2" wide by 1-1/2" high by 12" long (minimum)	1" wide by 1" high by 4" long (minimum)

NOTE: Distance between top of ridge board and bottom of tile must be equal or less than 1" for proper adhesion.

Head of tile must be in contact with or within a maximum 1/2" of adjacent tile underlap.

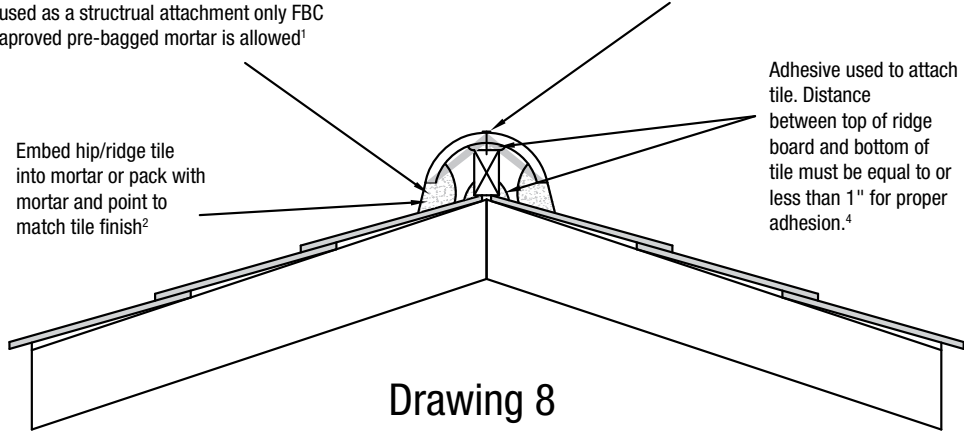
La cabeza de la teja debe estar en contacto, o a no más de 1/2", del tapeta de baldosas adyacentes.

Pre-bagged or job site mixed mortar may be used for weather blocking areas only. When used as a structural attachment only FBC approved pre-bagged mortar is allowed¹

For slopes greater than 7:12 attach with a nail or screw³

Adhesive used to attach tile. Distance between top of ridge board and bottom of tile must be equal to or less than 1" for proper adhesion.⁴

Embed hip/ridge tile into mortar or pack with mortar and point to match tile finish²



Drawing 8

Adhesive-set Hip and Ridge Tile using Mortar as a Weather Block

Coloque la teja de caballete y cumbrera con adhesivo y usando mortero como protección contra las inclemencias del tiempo

- ¹ El mortero premezclado o mezclado en el lugar se puede usar sólo en los lugares donde se lo usa como protección contra las inclemencias del tiempo. Cuando se usa como agregado de estructura, sólo se puede usar mortero premezclado aprobado por la FBC.
- ² Empotre la teja de caballete y cumbrera en el mortero o llénela de mortero y busque una terminación similar a la teja
- ³ Para pendientes mayores a 7:12 fijela con un clavo o un tornillo
- ⁴ El adhesivo se usa para fijar la teja y dar soporte estructural
- ⁵ Para pendientes mayores a 7:12 fijela con un clavo o un tornillo para dar soporte estructural.
- ⁶ Soporte estructural según el manual de FSRSA/RTI o el HVHZ del FBC (se muestra el metal)
- ⁷ Empotre la teja de forma que haya mortero en ambos lados del caballete/cumbrera o rellene con mortero después de que se instalaron las tejas de caballete y cumbrera y se curó el adhesivo
- ⁸ Trabaje el mortero para lograr una terminación similar a la teja 8
- ⁹ Solapamiento de la teja
- ¹⁰ Opcional: Instale adhesivo aprobado por el código en los solapamientos de las tejas caballete/cumbrera
- ¹¹ Instale adhesivo aprobado por el código sobre el soporte estructural según esté aprobado el producto del fabricante o el HVHZ de la FBC

Adhesive Attachment

Fijación con Adhesivo

Structural support according to FSRSA/RTI manual or the HVHZ of the FBC (metal shown)⁶

Install code approved adhesive on top of structural support according to adhesive manufacturer's product approval or the HVHZ of the FBC¹¹

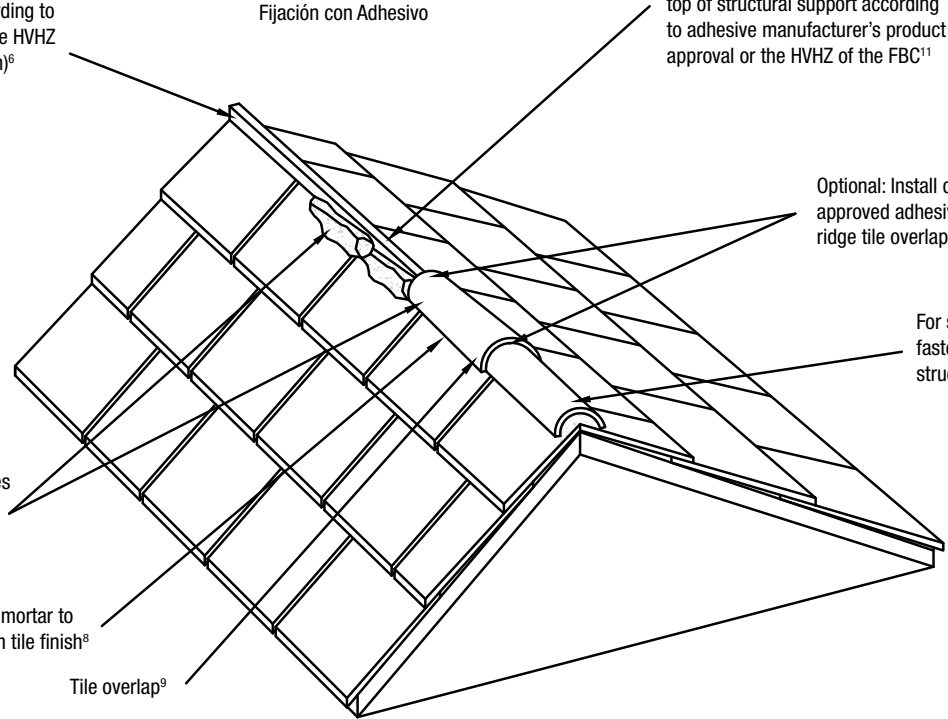
Optional: Install code approved adhesive at hip/ridge tile overlaps¹⁰

For slopes greater than 7:12 fasten with a nail or screw to structural support⁵

Embed tile into mortar bed both sides of hip/ridge or pack mortar into void after hip and ridge tiles are installed and adhesive has cured⁷

Point mortar to match tile finish⁸

Tile overlap⁹



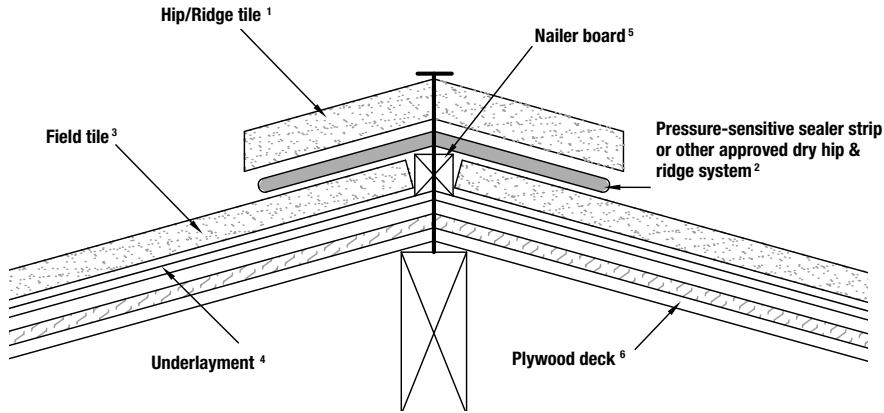
Drawing 9

Attaching Hip/Ridge Tile with Adhesive Using Mortar as Weather Blocking

Coloque la teja de caballete y cumbrera con adhesivo y usando mortero como protección contra las inclemencias del tiempo

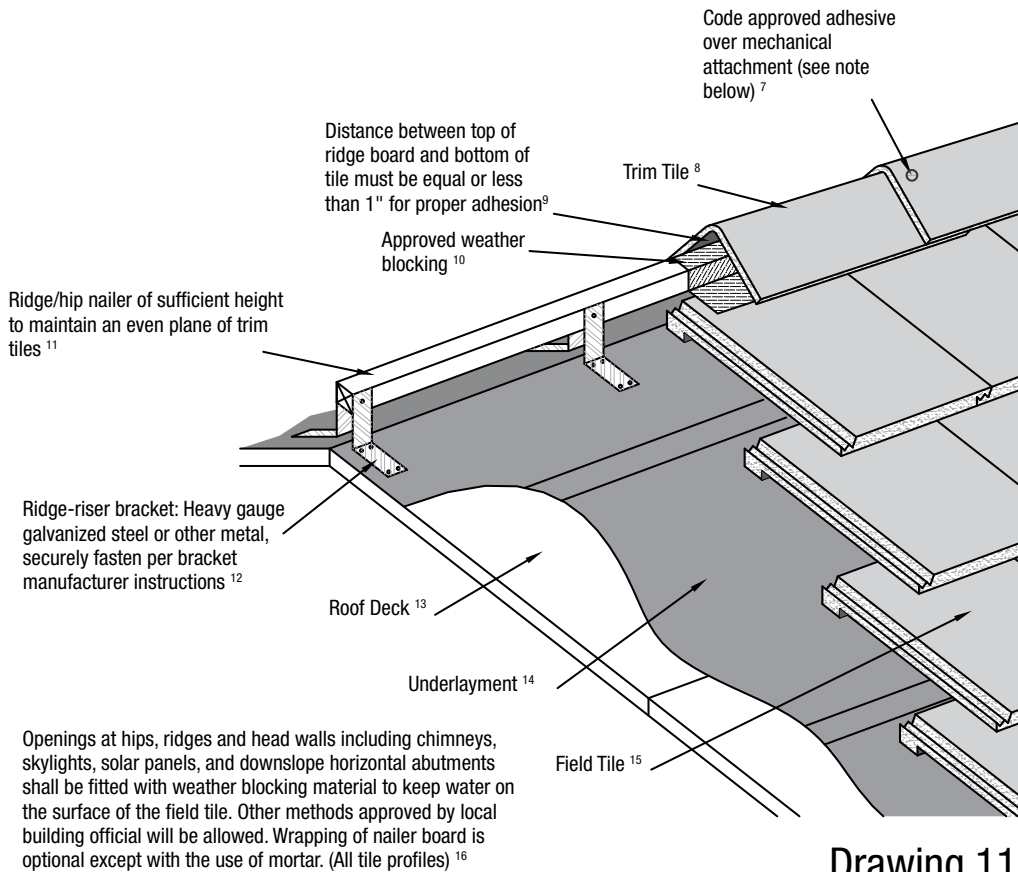
Hip and Ridge Tile Installation For Drawings 1, 2 & 4

Instalación de tejas de caballete y cumbrera para Gráficos 1, 2, & 4



Drawing 10

- ¹ Revestimiento de caballete/cumbrera
- ² Sellador sensible a la presión u otro sistema en seco aprobado para caballete y cumbrera
- ³ Revestimiento para teja
- ⁴ Lámina asfáltica
- ⁵ Clavadera
- ⁶ Plataforma de madera contrachapada



Drawing 11

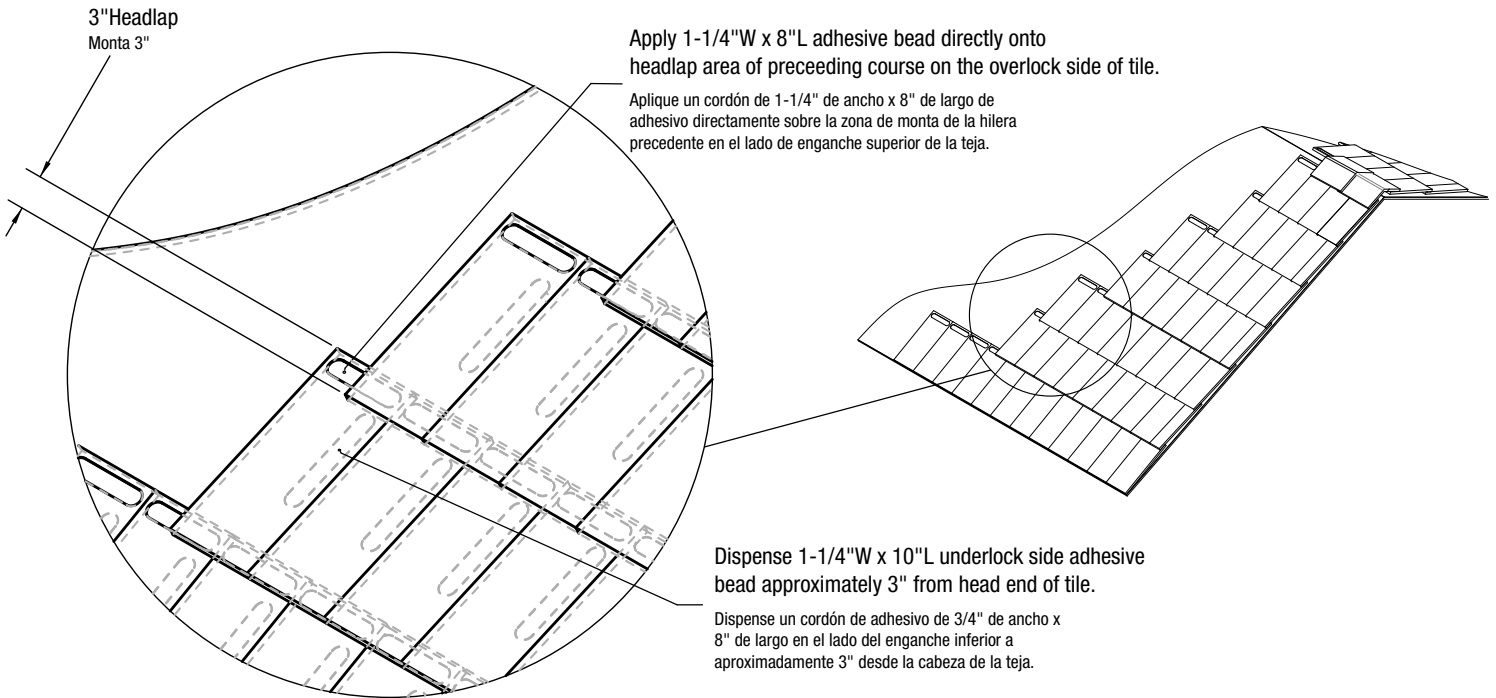
- ⁷ Adhesivo aprobado por el código sobre la fijación mecánica
- ⁸ Aristero
- ⁹ Distancia entre la parte superior de la viga de cumbrera y parte inferior de la teja debe ser igual o inferior a 1" para una adhesión adecuada
- ¹⁰ Protección contra las inclemencias del tiempo aprobada
- ¹¹ Clavadera para cumbrera/caballete de altura suficiente para mantener un plano elevado de las tejas moldura
- ¹² Soporte elevador de cumbrera: Acero galvanizado (u otro metal) de gran resistencia, sujetados según las instrucciones del fabricante
- ¹³ Plataforma de techo
- ¹⁴ Lámina asfáltica
- ¹⁵ Teja principal
- ¹⁶ Las aberturas en cumbreras, caballetes y contramuros incluyendo chimeneas, tragaluces, paneles solares y estribos horizontales hacia abajo deberán contar con material que proteja contra las inclemencias del tiempo para mantener el agua sobre la superficie de la teja principal. Se permitirán otros métodos aprobados por oficiales locales de la construcción. La envoltura de la clavadera es opcional, excepto con el uso de mortero. (Todos los perfiles de tejas)

Drawing #1: Concrete Tile - Flat/Low Profile

Gráfico #1: Teja De Hormigón - Perfil Plano/Bajo

TOUCH 'N SEAL STORM BOND ROOF TILE ADHESIVE PLACEMENT DETAIL — DOUBLE BEAD SYSTEM

DETALLE DE COLOCACIÓN DEL ADHESIVO PARA TEJAS DE TECHO TOUCH 'N SEAL STORM BOND — SISTEMA DE DOBLE CORDÓN

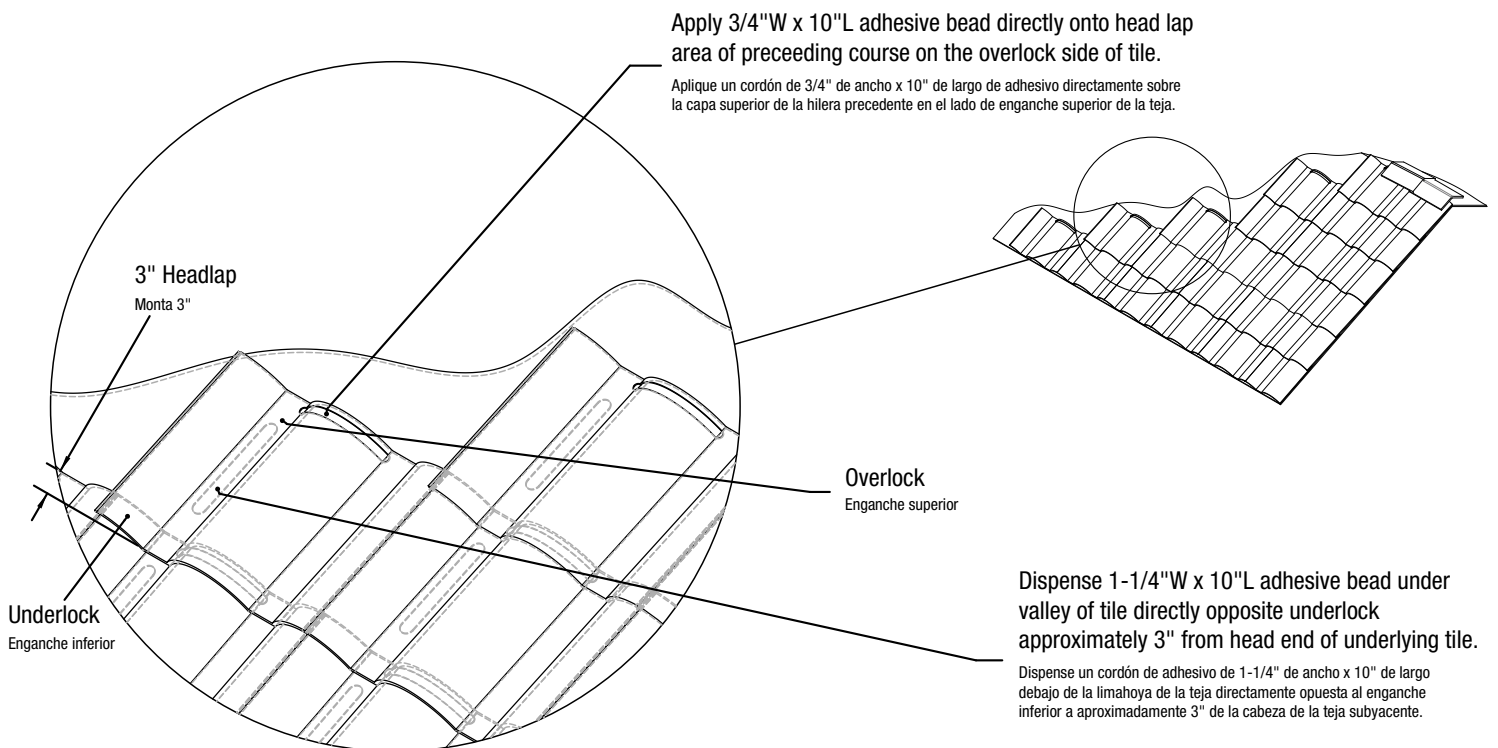


Drawing #2: Concrete Tile - Low/Medium Profile

Gráfico #2: Teja De Hormigón - Perfil Bajo/Medio

TOUCH 'N SEAL STORM BOND ROOF TILE ADHESIVE PLACEMENT DETAIL — DOUBLE BEAD SYSTEM

DETALLE DE COLOCACIÓN DEL ADHESIVO PARA TEJAS DE TECHO TOUCH 'N SEAL STORM BOND — SISTEMA DE DOBLE CORDÓN



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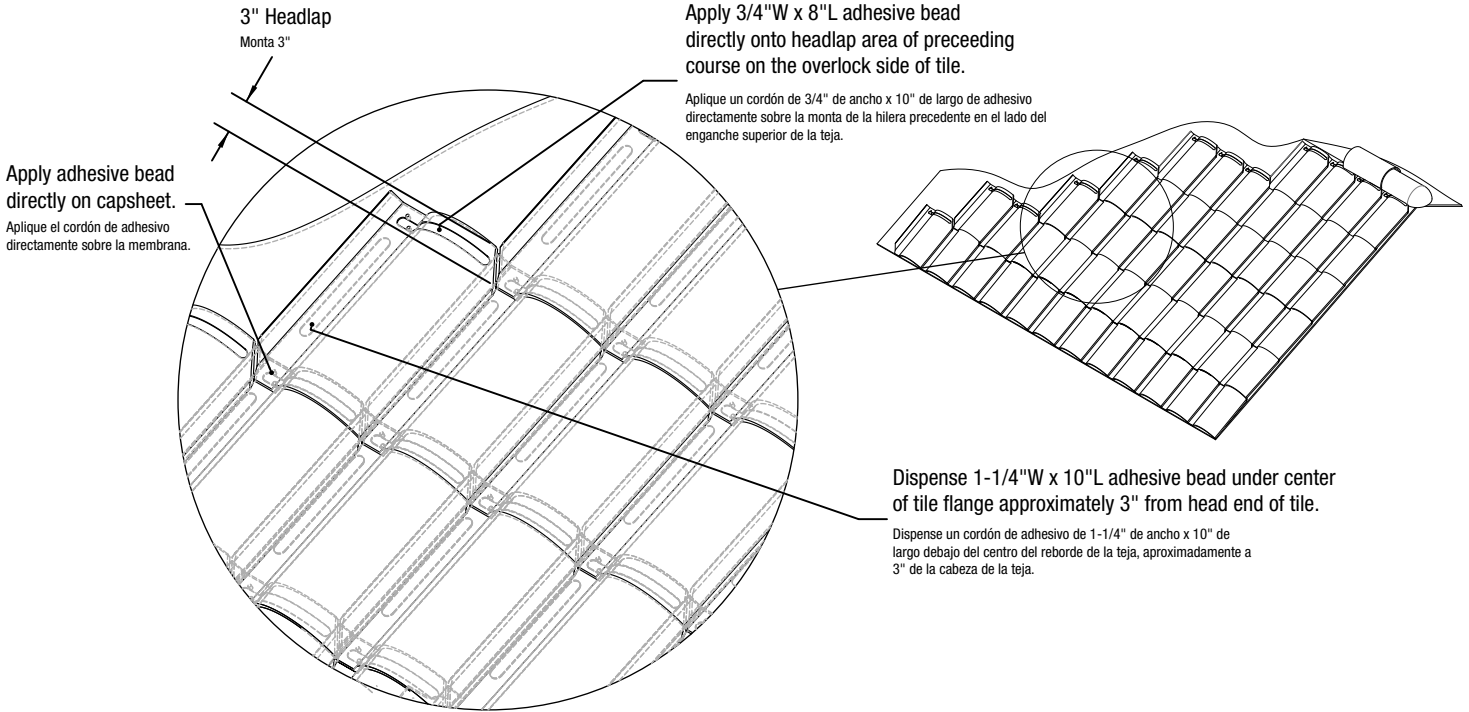
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Drawing #3: Concrete Tile - High Profile

Gráfico #3: Teja De Hormigón - Perfil Alto

TOUCH 'N SEAL STORM BOND ROOF TILE ADHESIVE PLACEMENT DETAIL — DOUBLE BEAD SYSTEM

DETALLE DE COLOCACIÓN DEL ADHESIVO PARA TEJAS DE TECHO TOUCH 'N SEAL STORM BOND — SISTEMA DE DOBLE CORDÓN

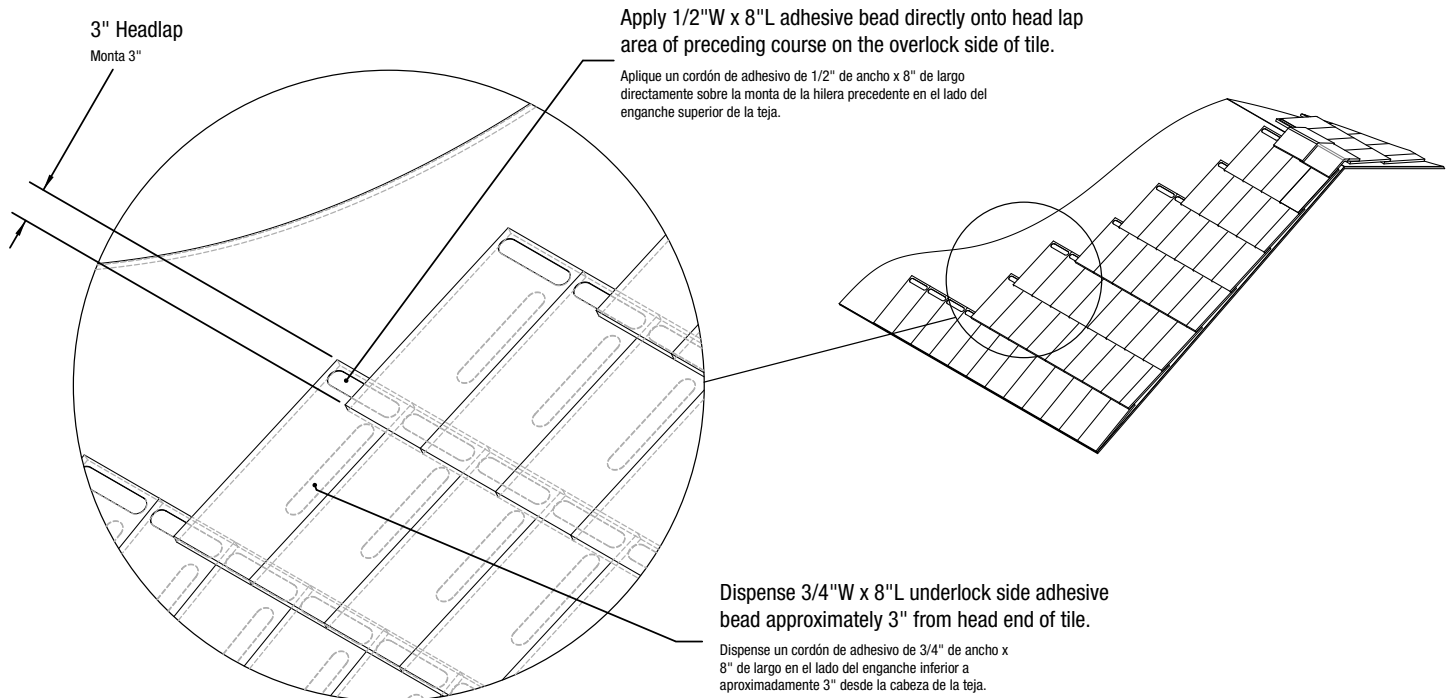


Drawing #4: Clay Tile - Flat Profile

Gráfico #4: Teja De Cerámica - Perfil Plano

TOUCH 'N SEAL STORM BOND ROOF TILE ADHESIVE PLACEMENT DETAIL — DOUBLE BEAD SYSTEM

DETALLE DE COLOCACIÓN DEL ADHESIVO PARA TEJAS DE TECHO TOUCH 'N SEAL STORM BOND — SISTEMA DE DOBLE CORDÓN

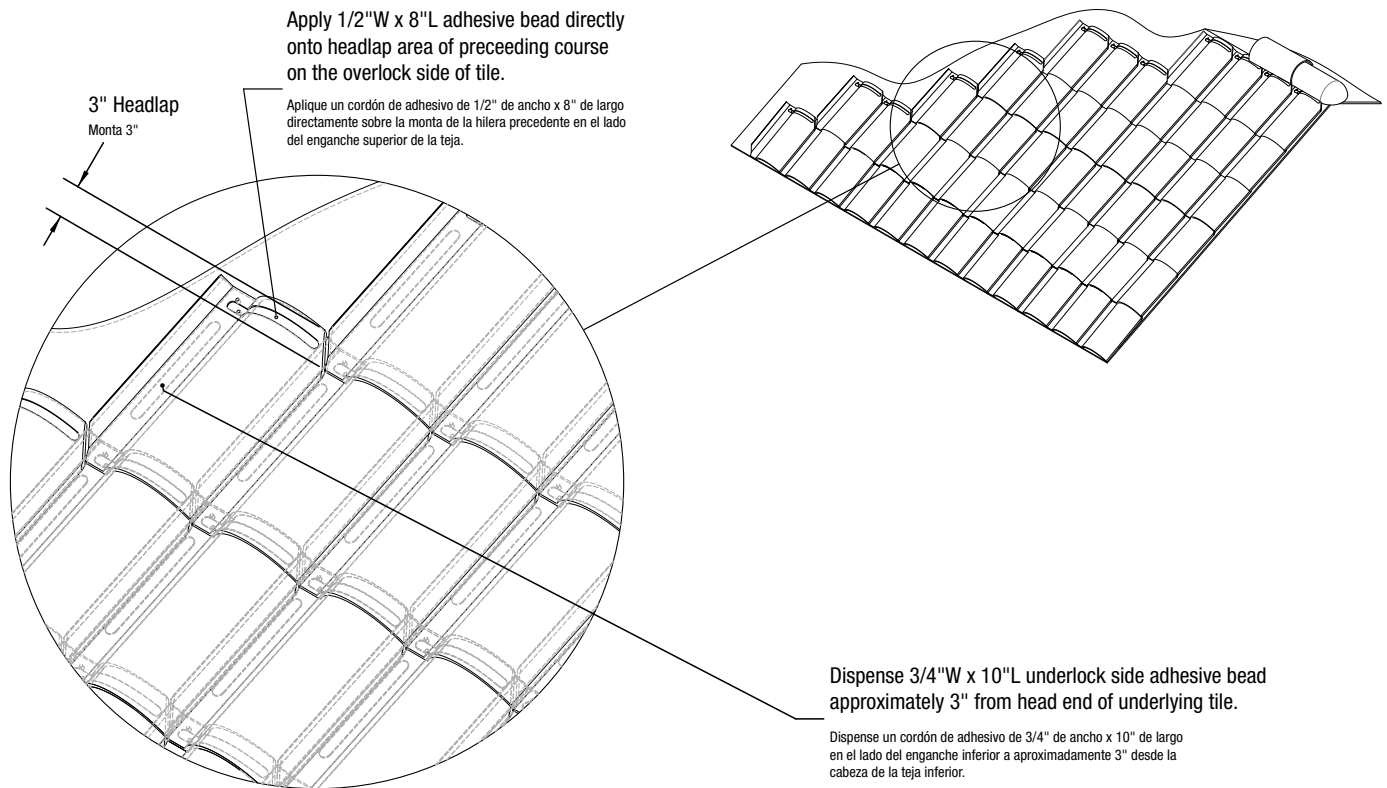


Drawing #5: Clay Tile - Low Profile

Gráfico #5: Teja De Cerámica - Perfil Bajo

TOUCH 'N SEAL STORM BOND ROOF TILE ADHESIVE PLACEMENT DETAIL — DOUBLE BEAD SYSTEM

DETALLE DE COLOCACIÓN DEL ADHESIVO PARA TEJAS DE TECHO TOUCH 'N SEAL STORM BOND — SISTEMA DE DOBLE CORDÓN

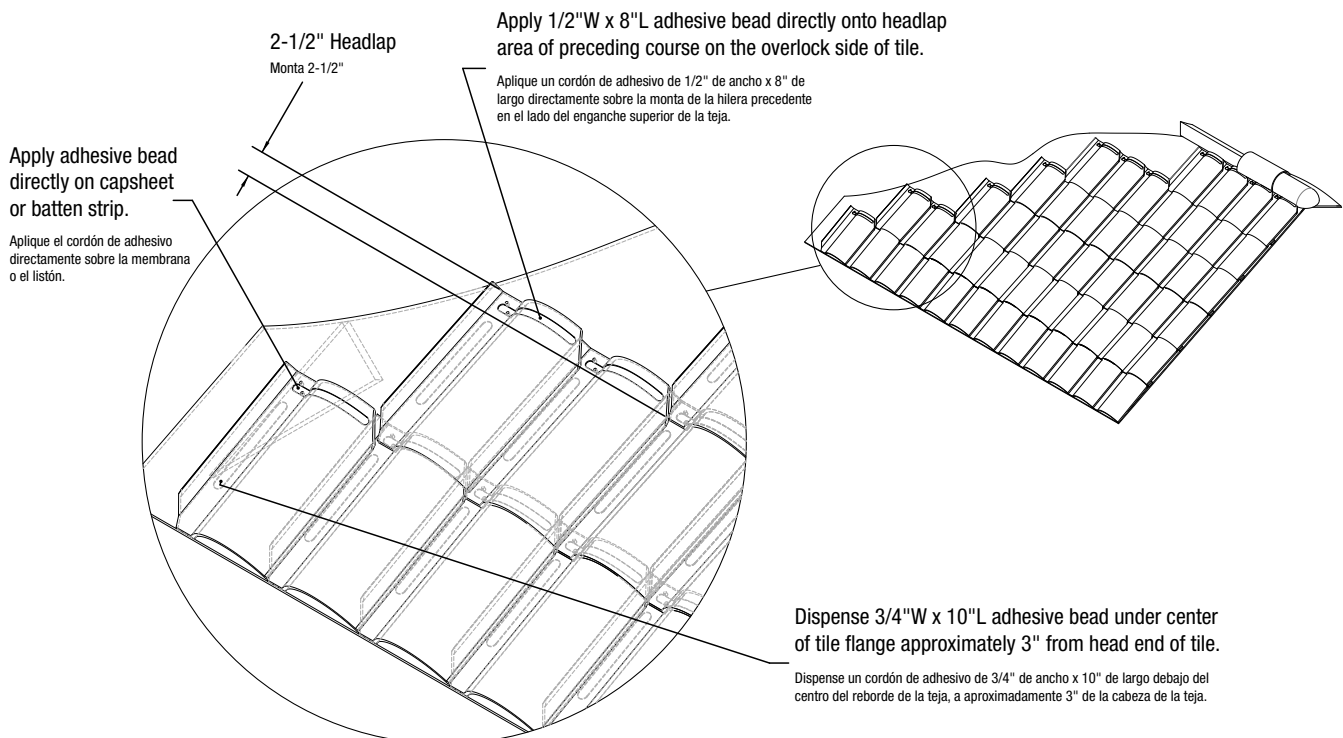


Drawing #6: Clay Tile - High Profile, S-Tile

Gráfico #6: Teja De Cerámica - Perfil Alto, Teja "S"

TOUCH 'N SEAL STORM BOND ROOF TILE ADHESIVE PLACEMENT DETAIL — DOUBLE BEAD SYSTEM

DETALLE DE COLOCACIÓN DEL ADHESIVO PARA TEJAS DE TECHO TOUCH 'N SEAL STORM BOND — SISTEMA DE DOBLE CORDÓN



Drawing #7: Clay Tile - High Profile, Barrel Tile

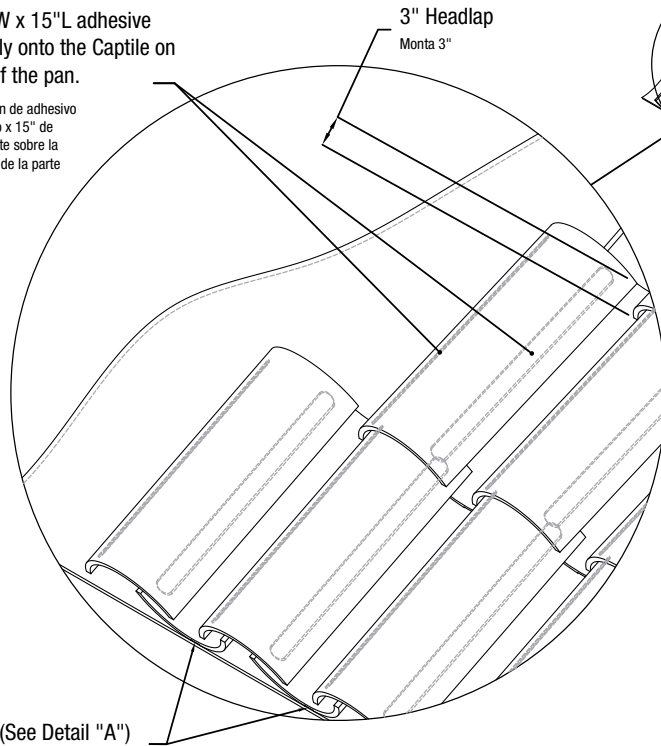
Gráfico #7: Teja De Cerámica - Perfil Alto, Teja Barril

TOUCH 'N SEAL STORM BOND ROOF TILE ADHESIVE PLACEMENT DETAIL

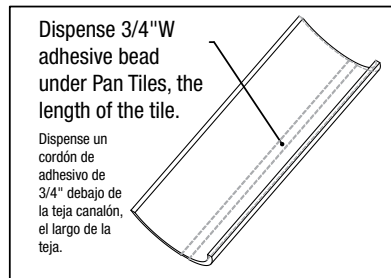
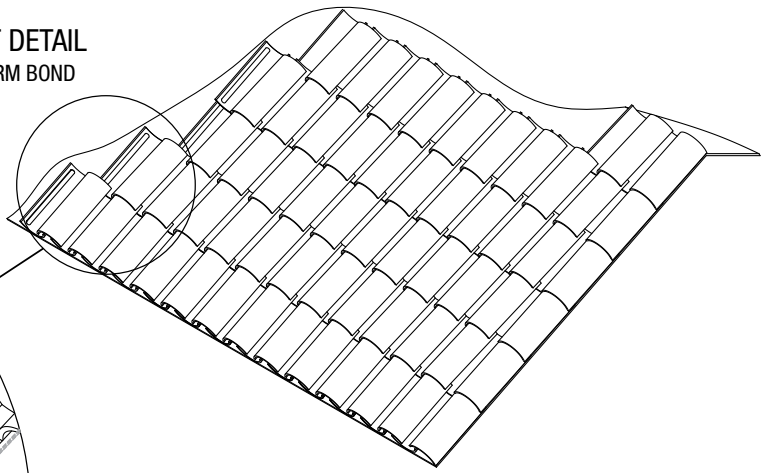
DETALLE DE COLOCACIÓN DEL ADHESIVO PARA TEJAS DE TECHO TOUCH 'N SEAL STORM BOND

Apply 3/4"W x 15"L adhesive bead directly onto the Captile on each side of the pan.

Aplique un cordón de adhesivo de 3/4" de ancho x 15" de largo directamente sobre la tapa a cada lado de la parte baja de la teja.



(See Detail "A")
(Ver Detalle "A")

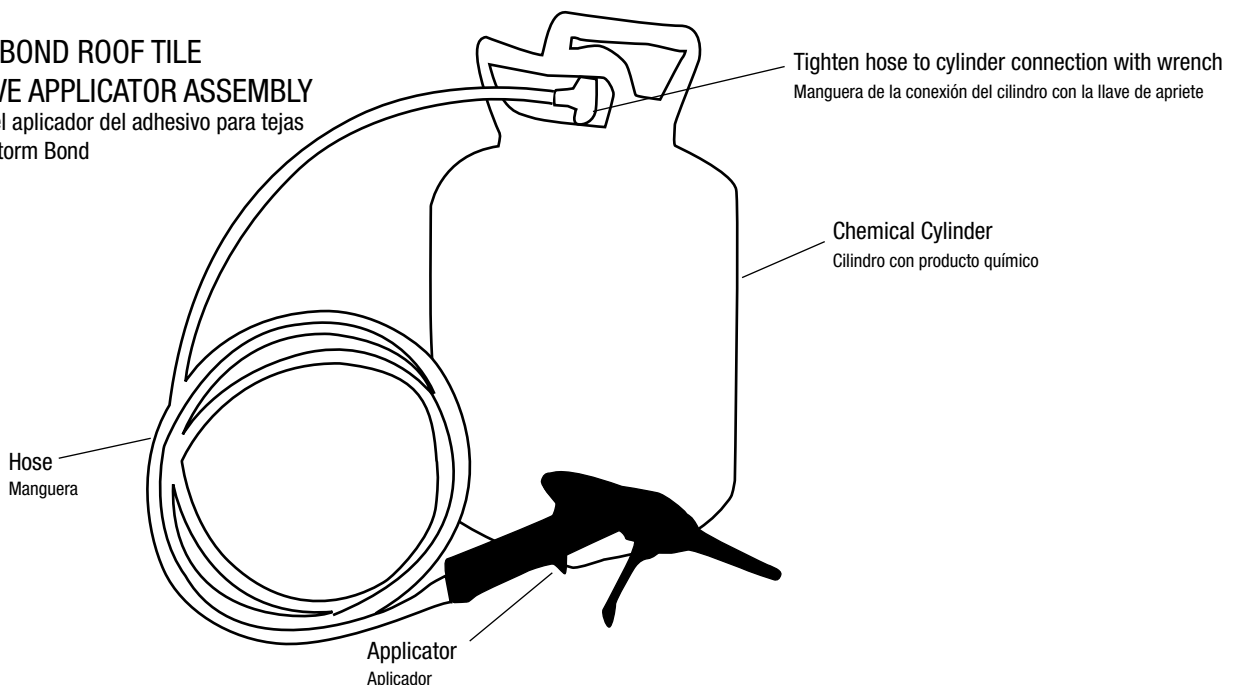


Detail "A"
Detalle "A"

Drawing #12

Gráfico #12

**STORM BOND ROOF TILE
ADHESIVE APPLICATOR ASSEMBLY**
Montaje del aplicador del adhesivo para tejas de techo Storm Bond



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