

## TECHNICAL BULLETIN

# Tips for Optimizing Performance of Sealant Joints within Sika Facade Systems

The following comments, procedures and tips should be followed by applicators to ensure proper preparation at and around areas expected to receive an application of an acceptable sealant within Sika Facades systems. In order for sealant joints to perform properly with Sika EIFS, sealant must be applied to the mesh-reinforced base coat and not to the textured acrylic finish coat. To accomplish this, it may be necessary to tape off or otherwise protect the areas expected to receive sealant application prior to application of the textured acrylic finish coat. ASTM C1397 Standard Practice for Application of Class PB Exterior Insulation and Finish Systems and ASTM C 1481 Standard Guide for Use of Joint Sealants with Exterior Insulation and Finish Systems (EIFS) provide additional guidance and clarification regarding the installation of sealant joints with EIFS. The following are key points to consider:

- Properly functioning joints require attention to design, selection of an appropriate sealant, proper sealant application and coordination of trades.
  - It is the design professional's responsibility to determine the size and location of joints and to specify the sealant. The design professional also ensures that the design is consistent with project conditions and guidelines of the EIFS manufacturer.
  - Prior to installation of sealant, consult with the sealant manufacturer and/or design professional regarding specific joint design and/or sealant primer application requirements to comply with the sealant manufacturer's warranty requirements.
- Sequential coordination of the various impacted trades, e.g., the General Contractor, framers, window/P-Tac installers, sealant contractors and the EIFS installer is essential. Sika Facades recommends that a pre-construction meeting be held to discuss window/P-Tac and other through-wall penetration placements and to ensure proper sequencing and scheduling.

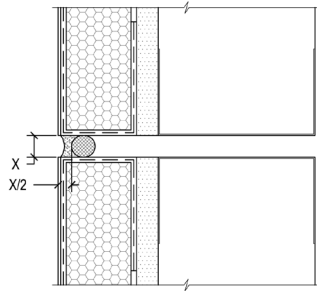
- Ensure that all terminations of SikaWall Facades EIFS are properly backwrapped with mesh-reinforced base coat; no reinforcing mesh color or predominant pattern should be visible through the base coat. This ensures that there will be a stable contact surface to receive an acceptable sealant.
- Sika requires that a properly configured sealant joint including closed cell backer rod/bond breaker tape and acceptable sealant be installed at all non drainage terminations of Sika EIFS including where EIFS abuts to dissimilar materials. This measure ensures a water tight seal.

Please note: Backer rods create the proper depth-to-width ratio, act as a bond breaker, and provide a firm surface against which tooling can be done.

- In certain situations it may not be possible to provide the required spacing for a traditional sealant joint (backer rod and sealant). In these cases, it is acceptable to provide a properly configured fillet bead type sealant joint, which shall include a triangular, closed cell backer rod or bond breaker tape. In these situations, it may be necessary to apply the sealant over the textured acrylic finish.
- When installing sealants with Sika systems other than EIFS (e.g. cement plaster stucco and cement board stucco type wall systems), sealant is applied to specific trim components. Prior to application of the acceptable sealant and/or sealant primer, verify that all trim components are completely clean and free from dirt/dust or other contaminants.

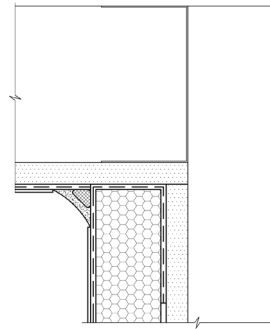
Although they represent only a small portion of the building's exterior, sealant joints perform a critical function in keeping the interior air and water-tight. To ensure the optimal performance of sealant joints, never compromise on their proper specification, detailing or installation.

The following drawings illustrate both proper and improper sealant joints.



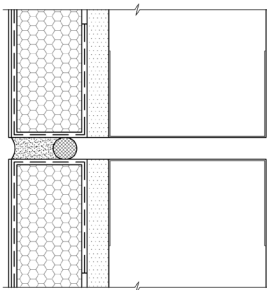
**PROPER SEALANT DEPTH**

The optimal depth of a sealant joint is half the sealant's width



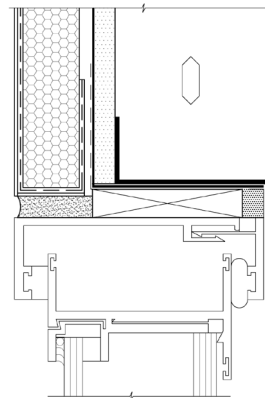
**PROPER FILLET BEAD OF SEALANT**

Ensure triangular backer rod or bond breaker tape is utilized for fillet bead installations.



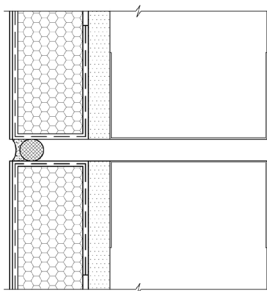
**IMPROPER DEEP SEALANT BEAD**

A stretched thick bead of sealant may cause undue stress at the bond line and rip the sealant from the substrate.



**IMPROPER THREE SIDED ADHESION**

Three-sided adhesion of the sealant may result in both adhesive and cohesive failures



**IMPROPER SHALLOW SEALANT BEAD**

A shallow bead of sealant may result in cohesive failure within the sealant itself.