A2P Technical Bulletin #1706-1A – Attaching Brick to GreenGirt

Abstract:

Brick is one of numerous cladding options that can be utilized with GreenGirt when best construction practices are followed. However, a few details need to be examined first for proper usage:

1) Dead load support
2) Brick tie attachment
3) Hat channels

Dead Load Support

GreenGirt has not been designed to support the dead load of a brick system. Standard brick ledges and standard steel lintels can be used. The GreenGirt span tables will provide a general guide for what size, orientation, and spacing of GreenGirt will suffice for the brick deflection criteria.

Brick Tie Attachment

For attaching the brick to GreenGirt, fasteners should be installed at the centerline of the exterior flange or closer to the web. Keep the eccentric loading of the brick tie at the flange centerline or closer to the web of the girt. See Figure 1 below.

Figure 1
Multiple brick ties have been approved by A2P as an attachment method. The RJ-711 is to be attached according to previously mentioned fastener requirements with the 90-degree angle toward the top of the exterior flange of the GreenGirt. See Figure 2 below.

The HVR-195VB is to be attached according to previously mentioned fastener requirements with the 90-degree angle toward the top of the exterior flange of the GreenGirt. See Figure 3 below.
The Pos-I-Tie Veneer Anchoring System is to be attached according to previously mentioned fastener requirements and with a washer to the exterior of the GreenGirt. See Figure 4 below.

Figure 4

Alternate brick ties may be used by following the same guidelines, but their usage requires written approval from A2P Engineering.
Hat Channels

For additional structural capability, use crosswise hat channels of sufficient capacity for brick tie attachment. Typical hat channels are 18 or 16 Ga. G-90 steel, 33 KSI or better.

Conclusion

When installed correctly, brick can be used effectively as a cladding in front of GreenGirt.