Chapter 6 – Anchored Masonry Veneer Systems

STEEL STUD-FRAMED BACKUP WALL: Window Sill Detail

Legend

1. Typical Assembly:
   - Interior gypsum board
   - Vapor retarder
   - Steel stud-framed wall with batt insulation
   - Exterior sheathing
   - Self-adhered sheet- or fluid-applied air barrier and WRB field membrane
   - Semi-rigid exterior insulation
   - Air cavity
   - Anchored masonry veneer
2. Non-flanged window on minimum 3/4-inch thick intermittent plastic shims
3. Sealant over bond breaker
4. Sloped sheet-metal sill flashing with hemmed edge and end dams (beyond), attached to intermittent L-angle at window per window manufacturer recommendations
5. Sloped precast sill with chamfered drip edge and sealant over backer rod at precast joints
6. Anchored masonry veneer
7. Continuous air barrier sealant tied to continuous seal at window perimeter
8. Back dam angle at sill, minimum 1 inch tall, fasten window through back dam angle
9. Self-adhered sheet- or fluid-applied air barrier and WRB flashing membrane
10. Intermittent structural support for precast sill (beyond)

Detail Discussion

The sheet-metal sill flashing conceals the rainscreen cavity. End dams exist on the sheet-metal sill flashing and terminate within a bed joint of the brick return beyond. This provides continuity of the water-shedding surface at the jamb to sill interface, minimizing the opportunity for water to enter the air cavity behind the brick.

This guide recommends against placing a sheet-metal flashing below the precast sill. It can prematurely degrade the mortar bed beneath the precast sill.

A chamfer is shown in the underside of the precast sill to form a drip. This encourages water to shed from the sill before reaching the masonry veneer below.

Water-Shedding Surface & Control Layers

Control Layers:

- Water
- Air
- Vapor
- Thermal

Note: Control layers are shown for a Class IV permeance (and sometimes Class III permeance) air barrier and WRB field membrane and where a vapor retarder is located at the interior face of the framing.