Chapter 7 – Single-Wythe CMU Systems

SINGLE-WYTE CMU WALL: Window Sill Detail

Legend

1. Typical Assembly:
   - Interior gypsum board
   - Steel stud-framed wall
   - Closed-cell spray foam (CCSPF) insulation between studs (optional)
   - Single-wythe CMU wall with water-repellent admixture at block and mortar
   - Clear water-repellent
2. Storefront window on minimum 1/4-inch thick intermittent shims
3. Sealant joint over backer rod (weep at quarter points)
4. Sloped precast sill with chamfered drip edge, with sealant over backer rod at precast joints
5. Continuous air barrier sealant tied to continuous seal at window perimeter
6. Continuous back dam angle at rough opening perimeter, minimum 1-inch tall, with window fastened through the back dam angle per window manufacturer recommendations
7. Preservative treated wood blocking

Detail Discussion

The slope at the precast sill encourages water to drain away from the window rough opening. 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.

Attachment of the window is shown through a structural back dam angle in lieu of down through the sill membrane. This minimizes the risk for water intrusion into the wall cavity below should water exist within the window rough opening. Intermittent shims below the window encourage drainage of the rough opening. Water that may exist within the rough opening can exit through weeps in the exterior sealant joint.

Water-Shedding Surface & Control Layers

Water-Shedding Surface and Control Layers of Detail 7-2