

# Notes for Wall Details

1. WRB = Weather-Resistant Barrier ( aka water-resistant barrier).  
The minimum requirements must meet applicable building code regulations. Provide minimum 6-inch vertical laps and 3-inch horizontal laps (preferred) per NFPA 5000 ( 2-inch minimum horizontal lap per IBC & IRC). Check with local code authority to verify requirements for WRB at specific projects.
1. WRB over wood framing:
    - 2000 IBC Section 1404.2 & 2000 IRC Section R703 require (1) layer No. 15 asphalt felt per ASTM D 226, Type 1.
    - (2) layers of Grade D building paper are required for stucco applications over wood-based sheathing in 1997 UBC Section 14.2 & 2000 IBC Section 2510.6. Generally, 2 layers of grade D, 60 minute building paper provide better performance than 1 layer.
    - (1) layer of building paper is permitted per International Code Council ( ICC) Evaluation Report ESR-1364 for Native Custom Stone exterior wall applications. However, 2 layers over wood-based sheathing is recommended for increased WRB durability.
  2. WRB over CMU / Concrete: Generally a WRB is not required for the mortar setting base coat over a substrate of CMU or concrete. However, if there is habitable space to the interior, then consideration for water management should be made which may include a WRB. When a WRB is used over a CMU/Concrete substrate the fasteners and integration with flashing, drips and screeds may require special detailing consideration, including the use of a mechanically attached lath.
2. GSM = Galvanized Sheet Metal. This usually refers to flashings that are fabricated with 24 gage minimum thickness. The sheet metal is coated with a G90 (preferred) or G60 (minimum) galvanizing. GSM Flashings should be mechanically fastened and soldered watertight (preferred method). Or, at a minimum, the sheet metal may be lapped 4-inches, minimum and sealed with 2 beads of a butyl or polyurethane sealant. Nail or screw fasteners for GSM flashings must be corrosion-resistant and penetrate to wall framing/blocking. The height of the vertical leg of L-type or Z-type flashings should be 3-inches minimum height. The vertical leg needs to be counter-flashed with a strip of SAF and/or the WRB.
3. SAF = Self-Adhering Flashing. This refers to peel-and-stick type membrane flashings. A 40 mil thickness is preferred, except where multiple layers lap, then a 25 mil thickness may be considered. Install shingle-fashion with SAF-to-SAF laps of 3 inches minimum. All edges and seams must be rolled flat and tight with a 1 to 2-inch wide solid hand roller. Integrate SAF with flashings and WRB lapped in shingle-fashion.
4. Foundation Weep Screed. Provide a means to weep water behind the Native Custom Stone at the bottom of framed wall with the mortar setting bed. A weep screed is a building code requirement with cement plaster over wood framed walls. Use a # 7 or # 36 type screed with a 3-1/2-inch vertical leg. Adjust the ground depth for the thickness of the scratch coat and mortar setting bed
5. Watertable Flashing. Provide a GSM flashing over the top of watertables and wainscots when additional wall cladding occurs above, including additional courses of Native Custom Stone. The flashing should extend on to the watertable/wainscot Native Custom Stone  $\Phi$  1/2 in. minimum. The outer edge of the flashing should have a hemmed edge for stiffness and to protect a raw sheet metal edge from rusting.
6. Soffit Edge Drip. The bottoms of vertical walls at soffit edges including recessed window heads must have an edge drip. Or, a means to prevent water from seeping back horizontally into the soffit or head recess must be provided. A drip screed can be used where a cement plaster base coat will be applied to the vertical wall and to the horizontal portion of the soffit/ wall head recess.
7. Bedding Seal under GSM flashing. The objective of the bedding seal is to limit water and air infiltration. The 3 options are: A. A generic weatherseal tape with adhesive to keep in place. B. Polyurethane sealant ASTM C-920, Type S, grade NS, Class 25; ASTM C-719 C. Mortar filler into voids under flashing and joints between stones.
8. Support Angle. A galvanized metal bracket or clip capable of supporting 5 pounds/linear foot of weight. The support angle can be a continuous bracket or separate clips to support each stone installed to wall framing/ stud blocking at 16-inches on center, maximum. Or, can use a 1-1/2" x 2" x 1-3/8" x 18 gage clip (equivalent to Simpson Strong Tie A-21) fastened to wall framing with (2) corrosion-resistant fasteners penetrating into wood wall framing/stud blocking 1" minimum, metal studs/blocking 5/8" minimum. Install support angle over the cement plaster scratch coat. Pre-drill holes and fill with butyl sealant to the WRB prior to fastening.
9. Scratch Coat. Base coat of mortar consisting of cement plaster shall cover the lath and be 3/8-inch minimum thickness. See Native Custom Stone material requirements.
10. Lath. Details show a galvanized metal lath separate from the WRB. Paper-backed lath may be considered for open-framing or retrofit conditions when accepted by the local jurisdiction. See Native Custom Stone material requirements.
11. Window Perimeter Sealant. A perimeter sealant joint is recommended between the termination of the scratch (mortar base) coat and vinyl window/door frames. It may also be necessary between some wood window/door frames when there is no exterior trim covering the joint. The exposed exterior sealant needs to adhere to the plaster termination and frame. The sealant selection should be confirmed with the sealant or window/door manufacturer.