Tile Assembly
AVM Systems 700/750
Exterior Roof or Deck Floors with Double Membrane over Concrete Substrates

Notes:
1. See AVM tile detail notes sheet for notes 2, 4, 5, 6, 8, 9, 10, 12.
2. AVM recommends using thin-set that meets ANSI A118.4 specifications, such as AVM thin-set 770. For best results, use AVM thin-set 780.

AVM thin set 770 or 780
Protective coating (optional)
Membrane AVM System 700 or 750
Mortar bed (AVM Crete 6400 or 6460)
Drain mat
Roof membrane sloped min. 1/4" per foot (call AVM for approved membrane)
Roof/deck

Tile, stone, etc.
Tile Assembly,
Exterior Roof or Deck Floors with
Single Membrane over Concrete substrates,
AVM Systems 700/750

L metal
Weep Screed
Vertical Trim (optional)
AVM Thin Set 770 or 780
Protective coating (optional)
Membrane AVM System 700 or 750
Flexible sealant
Concrete, above-ground

Slope deck surface min. 1/4" per foot

Terminations

Notes:
1. See AVM tile detail notes sheet for notes 2, 4, 5, 6, 9, 12.
2. Wall termination shown with L-Metal + Screed.
3. AVM recommends using thin-set that meets ANSI A118.4 specifications, such as AVM thin-set 770. For best results, use AVM thin-set 780.
4. If back side of tiled wall is exposed to the weather, it must be waterproofed.
Tile Assembly
AVM Systems 700/750
Exterior Balcony or Deck Floors over Concrete substrates

Notes:
1. See AVM tile detail notes sheet for notes 2, 4, 5, 6, 9, 12.
2. Wall termination/tie-in shown with Reglet detail
3. AVM recommends using thin-set that meets ANSI A118.4 specifications, such as AVM thin-set 770. For best results, use AVM thin-set 780.
Tile Assembly,
Exterior Floors over Slabs on Grade
AVM Systems 700/750

Notes:
1. See AVM tile detail notes sheet for notes 2, 4, 5, 6, 7, 9, 12.
2. Wall termination/tie-in shown with Reglet detail
3. AVM recommends using thin-set that meets ANSI A118.4 specifications, such as AVM thin-set 770. For best results, use AVM thin-set 780.
Tile Assembly, Exterior Floors over Slabs on Grade, with Bonded Mortar Bed
AVM Systems 700/750

Notes:
1. See AVM tile detail notes sheet for notes 2, 4, 5, 6, 7, 9, 12.
2. AVM recommends using thin-set that meets ANSI A118.4 specifications, such as AVM thin-set 770. For best results, use AVM thin-set 780.
Notes:
1. See AVM tile detail notes sheet for notes 2, 4, 5, 6, 8, 9, 10, 12.
2. AVM recommends using thin-set that meets ANSI A118.4 specifications, such as AVM thin-set 770. For best results, use AVM thin-set 780.
Tile Assembly, Exterior Roof or Deck Floors over Wood Frame, Single Membrane over Mortar-Bed, for Thin-Set, AVM Systems 700/750

Notes:
1. See AVM tile detail notes sheet for notes 2, 4, 5, 6, 8, 9, 12.
2. Wall termination shown with L-Metal + Screed.
3. AVM recommends using thin-set that meets ANSI A118.4 specifications, such as AVM Thin-Set 770. For best results, use AVM thin-set 780.
4. If back side of tiled wall is exposed to the weather, it must be waterproofed.
5. Must use min 5/8" exterior grade plywood. All plywood joints must be fully blocked.
6. Alternatively, The L-Metal may be installed directly onto the plywood before installing the metal lath and mortar bed.
Terminations (Thin-Set) Tile Assembly,
Exterior Roof or Deck Floors over Wood Frame
Single Membrane over Mortar-Bed, for Thin-Set,
AVM Systems 700/750

Notes:
1. See AVM tile detail notes sheet for notes 2, 4, 5, 6, 8, 9, 12.
2. AVM recommends using thin-set that meets ANSI A118.4 specifications, such as AVM Thin-Set 770. For best results, use AVM thin-set 780.
3. Must use min 5/8" exterior grade plywood. All plywood joints must be fully blocked.
Notes:
1. See AVM tile detail notes sheet for notes 2, 4, 5, 6, 8, 9, 12.
2. Wall termination shown with L-Metal + Screed.
3. AVM recommends using AVM Thickset 790, AVM Crete 6400 or 6460 or other approved thicksets.
4. If back side of tiled wall is exposed to the weather, it must be waterproofed.
5. Must use min 5/8" exterior grade plywood. All plywood joints must be fully blocked.
6. Metal lath or wire in the thickset could damage membrane. Always protect the membrane using "Protective Coating", paper or other protection.
7. The combined thickness of the thin mortar bed plus the setting bed must be a min 1.25" thick.
Tile Assembly, 
over Exterior Concrete or Masonry Walls, 
AVM Systems 700/750

Notes:
1. See AVM tile detail notes sheet for notes 3, 4, 5, 6.
2. AVM recommends using thin-set that meets ANSI A118.4 specifications, such as AVM thin-set 770. For best results, use AVM thin-set 780.
Tile Assembly
Over Exterior Concrete or Masonry Walls
With Mortar Bed
AVM Systems 700/750

Notes:
1. See AVM tile detail notes sheet for notes 3, 4, 5, 6, 13.
2. AVM recommends using thin-set that meets ANSI A118.4 specifications, such as AVM thin-set 770. For best results, use AVM thin-set 780.
Notes:
1. See AVM tile detail notes sheet for notes 1, 4, 5, 6, 13.
2. AVM recommends using thin-set that meets ANSI A118.4 specifications, such as AVM thin-set 770. For best results, use AVM thin-set 780.
Notes:
1. See AVM tile detail notes sheet for notes 3, 4, 5, 6.
2. AVM recommends using thin-set that meets ANSI A118.4 specifications, such as AVM thin-set 770. For best results, use AVM thin-set 780.
1. AVM System 750, non-breathable, non-reinforced liquid rubber membrane. ICC ESR-3450, ICC PMG-3450. AVM System 700, breathable, fully reinforced, UV stable, acrylic membrane. ICC ESR-2662, LARR 25431, LARR M-050065. Although either membrane may be used, for this type of application, AVM recommends using the AVM System 750. Optional: For extra protection, AVM recommends to install the “protective Coating” after the membrane is installed and tested. Anti-Fracture: If anti-fracture properties are desired, please see Note #15 for additional anti-fracture information.

2. AVM System 700, breathable, fully reinforced, UV stable, acrylic membrane. ICC ESR-2662, LARR 25431, LARR M-050065. AVM System 750, non-breathable, non-reinforced liquid rubber membrane. ICC ESR-3450, ICC PMG-3450. Although either membrane may be used, for this type of application, AVM recommends using the AVM System 700. Optional: For extra protection, AVM recommends to install the “protective Coating” after the membrane is installed and tested. Anti-Fracture: If anti-fracture properties are desired, please see Note #15 for additional anti-fracture information.

3. AVM System 750, non-breathable, non-reinforced liquid rubber membrane. ICC ESR-3450, ICC PMG-3450. AVM System 700, breathable, fully reinforced, UV stable, acrylic membrane. ICC ESR-2662, LARR 25431, LARR M-050065. Either membrane may be used, for this type of application. Optional: For extra protection, AVM recommends to install the “protective Coating” after the membrane is installed and tested. Anti-Fracture: If anti-fracture properties are desired, please see Note #15 for additional anti-fracture information.

4. The substrate surfaces must be structurally sound, clean, and dry, free of contamination, and prepared according to AVM’s Installation Instructions and industry standards. When installing AVM’s membranes on slabs on grade and/or hard to bond surfaces, use AVM’s epoxy primer.

5. AVM recommends all parties to consult approved resources and design professionals to ensure a complete and proper assembly.

6. Please refer to the TCNA® Handbook for Ceramic Tile Installation and AVM’s current data sheets and documentation for complete instructions and application limitations.

7. When installation is over slabs on grade, (on-ground concrete), installation of a waterproofing membrane is optional. If a membrane will be installed, verify moisture! If moisture exceeds 3 Lbs using a calcium chloride test, or exceeds other acceptable standards, consult with AVM prior to proceeding with installation. If a membrane will not be installed, the “Protective Coating” is not needed either.

8. Mortar Beds: The following mortar beds are recommended: AVM Crete 6400 (best) or AVM Crete 6460. Mortar beds must achieve a minimum of 2,000 PSI and be installed per TCNA’s standards. When installed over and bonded directly to concrete substrates (excluding light weight concrete substrates) the mortar bed may be un-reinforced. (If installing over 1.25” thick, reinforce with 2”x2” wire). When installed over wood floor substrates and/or as a non-bonded mortar bed, the mortar bed needs to be fully reinforced with Metal Lath 2.5 (aka Diamond Lath, min 2.5 Lbs/Sq.Yard) and be a min of 1.25 inches thick to create rigidity. Mortar beds (concrete float) installed over and bonded to concrete/block walls do not need to be reinforced. Mortar beds (concrete float) installed over Wood and other substrates should be reinforced with metal lath 2.5. (These recommendations are based on using AVM Crete 6400 or 6460, high-performance polymer modified mortar beds)

9. Reinforcement: AVM System 750: AVM recommends to reinforce the membrane in the following areas by embedding AVM Mat 800 into the membrane: At all corners (such as wall-to-wall and wall-to-floor corners), at drains, all penetrations and any transition in the surface plain. Reinforcement: AVM System 700: AVM System 700 is fully reinforced. Extra reinforcement (double fabric) at corners and other critical areas is optional. Refer to each system’s installation instructions for further details.

10. Roof Membranes: Roof membranes (also referred to as primary membranes) are often used in exterior roof or deck tile applications when installed over living or usable spaces: These assemblies have two membranes in their structure. The lower membrane (roof or primary membrane) and an upper membrane (secondary membrane) just below the tile, stone, etc. (the mortar bed separates the two). For the lower membrane (roof or primary membrane) AVM recommends to use AVM System 500 applied at a min 120 mils dry and fully reinforced with AVM Mat 800. Or, you may use other approved roofing membranes. (Consult with roofing membrane manufacturer) If a Drainage Mat is specified, consult with AVM for Drainage Mat recommendations.

11. AVM System 750, non-breathable, non-reinforced liquid rubber membrane. ICC ESR-3450, ICC PMG-3450. Only AVM System 750 is recommended for this type of application. Optional: For extra protection, AVM recommends to install the “protective Coating” after the membrane is installed and tested. Anti-Fracture: If anti-fracture properties are desired, please see Note #15 for additional anti-fracture information.

12. If drainage is a consideration: Verify that proper drains are used. (Tile drains also known as Double Drains/Triple Drains, etc). Also verify that all drains, drainage elevations, sloping and tie-ins are correct.

13. When the terms “Backer-Board” or “Cement Backer Board” or “Fiber Cement Backer Board” or “Coated Glass mat Water-Resistant Gypsum Backer Board” etc, are used, they are not exclusive to a particular manufacturer. Equal Backer Units from multiple manufacturers may be used. Consult your with design professional for more information. All joints/seams, etc, must be fully reinforced with AVM Mat 800.

14. Self Leveling underlayment may be used in lieu of the specified underlayment.

15. Anti-Fracture: Anti-Fracture membranes must be fully reinforced with fabric to work properly. If installing AVM System 700, it’s already fully reinforced, so no additional reinforcement is required. If installing AVM System 700, it has no reinforcement except at corners and other critical areas. Therefore, fabric must be embedded in the entire membrane. Use AVM Mat 800 for reinforcement. If the sole purpose of the membrane installation is for crack isolation, then refer to the “Crack Isolation (Anti-Fracture) Details” for additional installation information.

16. Shower receptors, curbs, seats, etc, must be properly waterproofed and installed to avoid water damage to adjacent building materials.