



TECHNICAL NOTICE

*For Related Construction
Trades*



TECHNICAL NOTICE: FOR RELATED CONSTRUCTION TRADES

ARCA acknowledges that other contracting trades are required to work on or through a roof system. The roofing contractor is concerned with the final integrity and the performance of the roof system. To this end ARCA has developed standards and details of which may impact the work performed by other trades. If there are questions or items of concerns not specifically covered, please contact the roofing contractor, roofing inspector or the ARCA technical staff.

The following is not an entire list of the standards. For a complete list refer to the ARCA Roofing Application Standards Manual. An ARCA Warranty Ltd. Warranty Certificate is available for projects that comply with ARCA established standards and details as follows:

ROOF DECK

Steel:

- Steel deck panels secured to supports and panels crimped where applicable.
- Openings greater than 200mm (8") supported from underside.
- Openings greater than 350mm (14") must be curbed.
- Perimeter edges of deck must be supported.

Concrete:

- Surface comparable to single pass power trowel finish.
- Precast panel joints that are greater than 6mm (1/4") in differential must be grouted or feathered. When height differences exceed 19 mm (3/4") a concrete topping must be applied to level the deck surface.

CONTROL JOINTS

Expansion Joints:

- Required when differential movements are expected.
- Must be a minimum of 200mm (8") above finished roof surface in a conventional design and 200mm (8") above the insulation (gravel ballast) or the pavers in a protected membranes design.
- No openings are permitted through expansion joints.
- Construction to meet the design parameters identified in ARCA Plate #1 of the Sheet Metal Flashing Details section of the manual.

Roof Area Dividers:

- Roof area dividers are required for BUR systems when the dimensions of the primary membrane of a separated roofing system exceeds 46 metres (150 ft.) in any direction. They are to be spaced so that the area enclosed by the dividers does not exceed approximately 1394 square metres (150 squares).
- Not required for a protected membrane design, single ply or two ply roof systems.
- Through openings are restricted to the top of a standard cant or 75 mm (3") above the primary membrane surface.
- Construction to meet the design parameters identified in ARCA Plate #2 of the Sheet Metal Flashing Details section of the manual.

CURBS

- In a conventional design the minimum height of curbs is 200mm (8") from the finished roof membrane surface.
- In a protected membrane design the minimum height of curbs is 200mm (8") from the insulation (if gravel ballast is used), or from the pavers surface.
- Curbs must be secured to the deck and blocking (if used) installed to match the primary insulation thickness (conventional designs).
- Responsibility for water proofing the top of curbs (including metal cap covers) is with the trade that required the penetration.
- Electrical conduit or gas lines connecting to mechanical units must not be installed through the vertical face of the units curb.
- Prefabricated metal curbs should be insulated and covered with plywood sheathing to receive the membrane flashing system.
- Hot pipes require a special non-combustible curb and hood.
- Curb hoods must be constructed in such a manner as to ensure that it is waterproof.



PERIMETERS

- The minimum parapet height permitted for protected membrane designs is 200mm (8") above the concrete paver or ballast surface.
- The minimum parapet height permitted for loose-laid ballasted membrane systems is 75mm (3") above the gravel ballast or concrete paver surface.
- Penetrations or fastening through the vertical face of membrane flashings must be no lower than 200mm (8") above the finished roof surface.

GUM CUPS (PITCH POCKETS)

- ARCA recommends that all openings be curbed, however, if gum cups are used to seal penetrations, there must be sufficient spacing (minimum of 50mm) between the penetrations and between the sides of the gum cup to permit installation of elastomeric sealant material.
- The roofing contractor must be advised of the number, size and location of all required gum cups prior to installation.
- The size of the gum cup is restricted to 300mm (12") on any side.
- Not permitted in a protected membrane or combination design roof assembly.

DRAINS

- If lead flashings are required they must be supplied to the roofing contractor for installation. The weight of the lead must be a minimum of five pounds/ft² and be sufficient size to extend beyond the edge of the drain hub a minimum of 150mm (6") in all directions.
- To be effective the lead must be properly dressed into the hub and the clamping ring securely bolted in place. A leaf or gravel guard (drain basket) must be installed. Responsibility for this work is the mechanical contractor who installs the drain.

ROOF JACKS

- If roof jacks are used they must be one piece or soldered to ensure a water tight seal.
- The deck flange must be a minimum of 150mm (6") in all directions.
- The largest opening that can receive a roof jack is 350mm (14"). Openings greater than this dimension must be curbed.
- Spun aluminum plumbing vents must be insulated and the extension pipe sealed to the vent hub.
- Storm collars must be installed and caulked around any penetration through the roof jack.

MISCELLANEOUS

- Sleepers required for utility lines across the roof surface must be properly installed to prevent damage to the roof membrane.
- Unsupported flexible cables can not be installed through a gum box.
- Multiple refrigerant lines and cables require a curb with a covered sloped hood. Lines and cables enter the side of the curb a minimum of 200mm (8") above the surface of the finished roof.
- Any penetration into the building must be 200mm (8") above roof level.
- Do not attach any apparatus through the top of the parapet.
- Snow removal or the cleaning of the deck is not included in the scope of work of the roofing contractor
- The completed roof surface must be protected when other trades intend to work in an area where damage could occur to the finished roof.



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