

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

Section 07590 - Horizontal Traffic Surfacing

Introduction

Systems described under this Section are intended to be installed on exterior walking surfaces which enclose habited space.

Where horizontal surfaces which do not enclose habited spaces are intended to be regularly occupied or otherwise used for the building occupants' activities, refer to the requirements of Section 07570 Traffic Topping.

Specify a complete horizontal traffic surfacing system, making the materials manufacturer responsible for the surfacing and flashing system. Require the materials manufacturer to make periodic inspections of the work in progress to ensure that the completed work will qualify for the required warranties.

Do not use traffic deck insulation as the only element in the overall building thermal resistance system. Refer to Section 07200.

This is a section where the consultant should use a "performance specification". Do not specify proprietary manufacturer's names or materials, and do not restrict vendors to a limited list.

Horizontal traffic surfacing repairs and modifications which are part of a renovation project should follow these standards as much as possible. Existing warranties must not be compromised. The consultant must prepare a complete specification and details for the required repair work. Generic "flashing as required" notes are not acceptable.

Be sure to coordinate specification requirements with traffic surfacing, flashing, and wall details.

Part 1 - General

- Require that materials manufacturer(s) and installer(s) demonstrate 5 years of successful installations of similar systems.
- Require submittal of:
 - Manufacturer's literature describing the system
 - Samples of proposed membrane materials
 - Samples of the proposed pavers
- Require a pre-installation conference, scheduled after the substrates are complete, and including the Contractor, Architect, Owner, materials manufacturer, and installing subcontractor(s).
- Horizontal traffic surfacing is a finish material, not a staging platform for further construction work. Include the following provisions:
 - Require the Contractor to install a "temporary roof" if he desires to "dry-in" the building to allow interior construction to begin or to provide a platform for further exterior construction
 - Describe this requirement as a "Contractor's Option", that is, if he wants to dry-in, he must do so only with a temporary roof
 - Reference the National Roofing Contractor's Association (NRCA) requirements for temporary roofs, including "sacrificial" insulation on metal decks
 - Specifically prohibit "phased" traffic surfacing installation
 - Specifically prohibit patches in the finished membrane
 - Require that finished systems be protected with plywood sheets for any and all construction traffic, and

that all equipment moving be accomplished with rollers

- Specify expanded warranties as follows:
 - 5 year warranty from the installer covering defects in installation
 - 10 year warranty from the materials manufacturer including defects in materials and installation, and guaranteeing to maintain the system in a waterproof condition for the life of the warranty
 - Renewal option for an additional 10 years from the materials manufacturer
 - Full replacement value without proration
 - Include all components of the traffic surfacing assembly, from the deck up, including removal and reinstallation of the pavers
 - Include sealing of all perimeters, joints, and penetrations
 - Both furnished on the University's special warranty form

Part 2 - Products

- Expressly prohibit the use of asbestos-containing materials.
- Require that all primary and secondary materials be supplied by a single manufacturer, or approved by the primary materials manufacturer, to ensure single-point responsibility for the installation and warranty.
- Specify a manufacturer's standard horizontal traffic surfacing system as follows:
 - UL Class A fire rating
 - Fabric-reinforced fully-adhered, rubberized asphalt membrane, 225 mils minimum thickness
 - Integral cove flashing
 - Manufacturer's proprietary protection sheet
 - Manufacturer's proprietary drainage sheet
 - 1" thick, cfc-free, extruded polystyrene foam insulation, approved by horizontal traffic surfacing system manufacturer
 - Precast concrete pavers
 - *Special attention shall be given so as to ensure that concrete pavers provide appropriate slip resistance. Stained, coated or painted pavers are expressly prohibited.*

Part 3 - Execution

- Specifically require the horizontal traffic surfacing to be installed in accordance with the manufacturer's recommendations.
- Refer to and describe the appropriate SMCNA details for each edge and penetration conditions.
- Require the traffic surfacing installer to receive, accept, and install, all sheet metal flashings.
- Specifically prohibit:
 - Pitch pans
 - Guy wires fastened directly to the deck
 - Painting or coating Lightning Protection
- Specify (or detail) 3/4" plywood nailers at all parapet walls.
- Require a spray test after completion of the roofing system, to be witnessed by the Contractor, Architect, Owner, materials manufacturer, and installing contractor(s).

End of Section 07570