

Revision Date: 07/29/2021

1. **Design Criteria:**

- a. The general design intent is for new slate roofs on the UVM campus to be similar in appearance to buildings in the University Green District of the campus including the following buildings
 - i. Old Mill
 - ii. Billings Library
 - iii. Williams Hall
 - iv. Discovery/Innovation Halls
 - v. Central Campus Residence Hall
- b. Replaced slate shall match the existing building slate.

2. **Reference Standards:**

- a. To be specified by Design Professional
- b. Jenkins, Joseph C. *The Slate Roof Bible*. Joseph Jenkins Inc., 2016.

3. **University Approval is Required for the Following Submittals**

- a. Slate samples for color and quality verification
- b. All associated fasteners, and waterproofing materials
- c. Related flashings that are included in the roofing assembly
 - i. Shop drawings
 - ii. Mockups for verification
- d. Sample warranties
- e. All proposed material and installation methods information

4. **Products, Materials & Equipment:**

- a. Slate Shingles:
 - i. For new construction, match “Vermont Semi-Weathering Grey Green”, Vermont Slate Company, or as selected by UVM.
 - ii. For repair or restoration, match existing slate in size and shape.
 - iii. Standard thickness for new buildings: 0.375” minimum, rectangular shape, standard square cut edges.
 - iv. Standard shape and cut for new buildings: rectangular, standard square cut.
 - v. Confirm specified size is locally available

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- vi. Slates shall conform to ASTM C 406 and shall be Grade S1.
 - vii. Chips, cracks, missing corners or breaks not acceptable
 - b. Slate Nails:
 - i. ≥ 10 gage copper, smooth shank with slating head. Structural wood penetration ≥ 0.75 ". Ideal penetration is not more than $\frac{1}{4}$ " through underside of sheathing.
 - c. Slate hooks: Utilize slate hooks in combination with copper nails where falling slate may impact pedestrians.
 - d. Underlayment shall be a breathable membrane material.
 - e. Provide self-adhered waterproofing membrane at roof edge where eaves are present. Do not cover entire roof with waterproof membrane
 - i. Extend membrane 2 feet above the vertical projection of the interior face of the exterior wall below
- 5. **Installation, Fabrication, and Construction:**
 - a. Provide two nails at each slate, minimum. Large slates may require more. Nails to be located below the headlap of upper course.
 - b. Type and number of layers of underlayment to be specified by Design Professionals.
- 6. **Warranties:**
 - a. Slate Quarry Vendor Warranty for Slate Material: min. 75 years. Throughout warranty, no reduction in ASTM C406 Grade S1 Requirements. Excludes slate thickness due to natural wear.
 - b. Warranty for slate fasteners: min. 30 years. Throughout warranty, no reduction in structural performance due to fastener degradation
 - c. Slate Installer Warranty for Total Slate Roof System Water tightness: 5 years minimum. 100% Labor and Materials to maintain water tightness of the total slate system from edge to edge including all details, terminations, and penetrations. Sealant or roof mastic repair is not acceptable. Remove and rebuild roof system at repair locations
 - d. Slate Installer Warranty for Roof Slates: 2 Years minimum. 100% labor, materials, including all necessary means, to remove and replace cracked, shipped, broken, damaged, displaced and missing slates. Include hail damage and sustained 75mph winds speeds. Exclude vandalism.