

EFFECTIVE JULY 17, 2025 AND SUPERSEDES ALL PREVIOUS VERSIONS.

SPEC NOTE: Henry® ULTRATouch™ Recycled Denim Insulation. This specification is ideally suited for buildings installing unfaced batts denim insulation in accordance with insulation requirements of the International Building Code (IBC) and International Residential Code (IRC). ULTRATouch is intended for use when insulating ceilings, exterior walls, basements, and crawl spaces.

SPEC NOTE: This document includes Henry notes to assist the architect/specification writer. A Henry “SPEC NOTE” immediately precedes the text to which it is referring. The section is a guideline; modify to meet project specific requirements. Delete spec notes in the final copy of the specification.

**SECTION 07 21 16
BLANKET INSULATION**

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section Includes
 - 1. Batt and blanket insulation for [ceilings, exterior walls, basements, and crawl spaces]

SPEC NOTE: Coordinate with project specific Sections.

- 1. Section 07 92 19 – Acoustical Joint Sealants: complete air sealing complete prior to batt installation. Verify holes and seams between drywall, sheathing, and subflooring at the building envelope are sealed with caulk, tape, or foam sealants.
- 2. Section 07 26 00 – Vapor Retarders: Verify project specific conditions and vapor barrier requirements.

- B. Related Requirements
 - 1. Section 07 92 19 – Acoustical Joint Sealants
 - 2. Section 07 26 00 – Vapor Retarders

1.2 REFERENCES

- A. Reference Standards
 - 1. American Society for Testing and Materials (ASTM)
 - a. ASTM C739 – Standard Specification for Cellulosic Fiber Loose-Fill Thermal Insulation
 - b. ASTM D779 – Standard Test Method for Determining the Water Vapor Resistance of Sheet Materials in Contact with Liquid Water by the Dry Indicator Method
 - c. ASTM E84 – Standard Test Method for Surface Burning Characteristics of Building Materials
 - d. ASTM E119 – Standard Test Methods for Fire Tests of Building Construction and Materials
 - 2. International Code Council (ICC)
 - a. AC81 Acceptance Criteria for Natural Fiber Insulation
 - 3. Underwriters Laboratories (UL)
 - a. UL 263 – Fire Tests of Building Construction and Material

1.3 ADMINISTRATIVE REQUIREMENTS

- A. Pre-installation Meetings
 - 1. Review conditions, installation procedures, schedules, and coordination with other Work.

1.4 SUBMITTALS

- A. Provide submittals in accordance with Section 01 33 00 Submittal Procedures.

- B. Action submittals:
 - 1. Product data
 - a. Guide specification
 - b. Safety data sheets
 - c. Installation guide
 - d. Technical data sheets
 - 2. Certificates
 - a. Product certification
 - 3. Tests and evaluation report
 - a. ICC-ES evaluation report

1.5 QUALITY ASSURANCE

- A. Qualifications
 - 1. Manufacturer qualifications:
 - a. Manufacturer must not issue warranties for terms longer than they have been manufacturing and supplying specified products for similar scope of Work.
 - 2. Installer qualifications:
 - a. Experienced in similar Work as described in this Section.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Delivery and Acceptance Requirements
 - 1. Deliver materials in original, factory-sealed, unopened containers with intact and legible product label and manufacturer name.
- B. Storage and Handling
 - 1. Store materials as recommended by the Manufacturer in a protected area and out of direct sunlight. Protect materials from rain and physical damage.

1.7 SITE CONDITIONS

- A. Ambient Conditions
 - 1. Do not perform Work on surfaces that are wet to touch.
 - 2. Refer to product specific technical data sheet.

1.8 WARRANTY

- A. Manufacturer Warranty
 - 1. Material warranty:
 - a. Warrants product against product defect. Provides material only for a period of 1-year from date of purchase.

PART 2 - PRODUCTS

2.1 ASSEMBLIES

- A. Manufacturers
 - 1. Acceptable manufacturers
 - a. Henry® a Carlisle Company
336 Cold Stream Rd.
Kimberton, PA 19442
(800) 486-1278
www.Henry.com

- B. Performance Criteria
 - 1. Surface burning characteristics (ASTM E84): Class-1
 - 2. Fire hazard classification (ASTM E84): Class-1
 - 3. Thermal resistance (R-value): 13 at 3.5" [89mm] thick
 - 4. Corrosion resistance (ASTM C739): Pass
 - 5. Fungi and bacteria resistance (ASTM C739): Pass (no growth)
 - 6. Moisture absorption (ASTM C739): <15%
 - 7. Fire resistance rating (ASTM E119/UL 263): Pass (1-hour rating)

- C. Materials
 - 1. Blanket insulation
 - a. Natural cotton fiber insulation made from recycled denim clothing, having the following properties:
 - 1. Basis of design: Henry® ULTRATouch™ Recycled Denim Insulation
 - 2. Surface burning characteristics (ASTM E84): Class-1
 - 3. Fire hazard classification (ASTM E84): Class-1
 - 4. Thermal resistance (R-value): 13 at 3.5" [89mm] thick
 - 5. Corrosion resistance (ASTM C739): Pass
 - 6. Fungi and bacteria resistance (ASTM C739): Pass (no growth)
 - 7. Moisture absorption (ASTM C739): <15%
 - 8. Fire resistance rating (ASTM E119/UL 263): Pass (1-hour rating)
 - 2. Sealant
 - a. One component, moisture curing, non-sag, gun-grade elastomeric polymer:
 - 1. Basis of design: Henry® Moistop Sealant
 - b. STPE, Moisture-cure, one component elastomeric liquid applied flashing:
 - 1. Basis of design: Henry® Air-Bloc LF® Liquid Applied Flashing

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions
 - 1. Verify the substrate is in accordance with Insulation Manufacturer requirements and as specified in this Section prior to insulation installation. Commencement of the Work indicates installer acceptance of the substrate.
 - a. Verify surfaces are dry, continuous and secure, and without large voids, or sharp protrusions.
 - b. Verify electrical, plumbing, and mechanical components are installed and permanently secured.
 - c. Verify finished basement walls are sealed or waterproofed to prevent moisture penetration.

3.2 PREPARATION

- A. Surface Preparation
 - 1. Vented attics:
 - a. Install a baffle adjacent to soffit and eave vents to maintain an opening equal to or greater than vent size.
 - b. Extend baffle over the top of insulation.
 - 2. Cathedral ceilings
 - a. Staple prefabricated vent chutes between joists with one end over the wall top plate.
 - b. Ensure there is at least 1-inch [25 millimeters] between roof sheathing and insulation

3.3 INSTALLATION

- A. Detailing and Flashing

1. Seal holes, substrate joint seams, and around penetrations and wiring with sealant to create a continuous air seal.
2. Refer to Insulation Manufacturer installation instructions for installation tips and techniques including, but not limited to, insulating around heat-producing surfaces, electrical boxes, junction boxes, wiring in walls and ceilings, pipes, plumbing, windows, knee walls, ductwork, recessed lighting, attic hatches, and non-standard sized cavities.

B. Insulation

1. Install insulation 3 inches [75 millimeters] minimum from recessed lighting fixtures that are not rated IC rated, metal chimneys, gas water heater flues, or other heat generating sources.
2. Ceilings:
 - a. Gently press insulation between ceiling joists to create a friction fit, holding insulation in place.
 - b. Cover top plate with insulation on exterior walls.
 - c. Do not block air flow at eave vents.
3. Exterior walls and finished basements
 - a. Cut insulation 1-inch [25 millimeters] longer than framing cavity.
 - b. Gently press insulation between studs to create a continuous surface with no insulation gaps or protrusions in the back.
 - c. Do not double over or compress insulation.
 - d. Gaps between joists:
 1. Cut insulation into pieces slightly larger than gap.
 2. Press insulation into gap with a screwdriver or putty knife.
4. Vented crawlspaces
 - a. Install vapor barrier into cavities, in direct contact with the subfloor prior to insulation installation.
 - b. Gently press insulation between joists to create a friction fit, holding insulation in place.
 - c. Secure insulation to joists or crawl space cavities using a mesh or wire support.
5. Unvented crawlspaces
 - a. Ground surface preparation:
 1. Cover ground with 6-mil plastic film.
 2. Overlap plastic film seams 12 inches [300 millimeters] and seal with tape.
 3. Extend plastic film up exterior crawl space walls 6 inches [150 millimeters].
 4. Secure plastic film to exterior walls with tape.
 - b. Install insulation on exterior walls directly under header joists, between floor joists.
 - c. Completely fill spaces enclosed by sub-floor, sill, and floor joints with insulation.
 - d. Cut insulation at lengths to allow insulation to extend 24 inches [600 millimeters] into crawl space when and staple insulation to stringer joists at underside of sub-floor.
 - e. Anchor insulation to base of wall with 2x4s.
 - f. Verify insulation is installed tightly, butted together, and with no gaps.
6. Insulating floors
 - a. Install vapor barrier into cavities, in direct contact with the subfloor prior to insulation installation.
 - b. Gently press insulation between joists to create a friction fit, holding insulation in place.
 - c. Secure insulation to joists or crawl space cavities using straight, rigid wire fasteners with pointed ends.

3.4 SITE QUALITY CONTROL

A. Installation Observations

1. Observe insulation installation during the following phases:
 - a. Insulation installation start
 - b. Prior to drywall installation

B. Final Observation and Verification

1. [Architect] [Consultant] [Contractor] to complete final observation prior to drywall installation.

3.5 CLEANING

A. Waste Management

1. As the Work proceeds, and upon completion, promptly clean up and remove from the premises all rubbish and surplus materials resulting from the foregoing Work.
2. Clean soiled surfaces, spatters, and damage caused by Work of this Section.

3.6 PROTECTION

A. Protect insulation from damage by other trades.

B. Cover insulation as soon as practical after application.

END OF SECTION