

OUTLINE WORK SCOPE: FALMOUTH TOWN HALL INSULATION UPGRADE

| LINE ITEM # | WORK ITEM | LOCATION | RELATED WORK |
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| AREA "A": ROOF DECK, SLOPED CEILINGS | | | |
| 1 | Insulate the interior surface of the open roof deck with five (5) inches of closed cell, high-density, urethane spray insulation, on the surface of the roof deck between the rafters. Include the open-roof deck area behind the knee walls. Fire rate the spray-foam insulation material to conform to the Maine State Fire Code. | Open area, plus behind the knee walls of both sides of the open area, plus the roof deck of the mechanical room located in the NW corner of the space. See reference Drawings "A-1" & "A-2". | Ceiling removal, staging, storage relocation and protection. The building must be vacated during and after the spray foam installation. Note: The GWB of the knee walls provides a fire barrier for the sprayed foam behind the knee walls; the open-room area must be fire rated, per the State Fire Code. Create access openings in the knee walls, each side. |
| 2 | Alternate #1: Install one and one-half (1 1/2) inches of urethane, sprayed foam insulation on the roof rafters of the roof deck, incl fire rating to conform to the Maine fire code. | Open area, plus behind the knee walls of both sides of the main area, plus the roof deck of the mechanical room located in the NW corner of the space. See reference Drawings "A-1" & "A-2". | Added measure to reduce the "thermal-bridging" heat loss, through the roof frame, to the roof deck. |
| 3 | Install six and three-quarters (6 3/4) inches of cellulose, dense pack insulation in the enclosed ceiling rafter bays. | Enclosed ceiling areas, located between the open, high roof and open knee wall roof areas. See reference Drawings "A-1" & "A-2". | Removal the existing fiberglass insulation and rafter vent material from rafter bays or the enclosed ceiling. |

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| 4 | Install high-density spray foam on the roof deck of the west-side Mechanical Room. (Similar to Item #1 above) | West side Mechanical Room only. Note: The East side machanical Room roof deck is not accessible. See reference Drawings "A-1" & "A-2". | Remove the existing fiberglass insulation located in the roof rafter bays. |
| AREA "B": ATTIC FLAT, SLOPED CEILINGS, KNEE WALL, ROOF DECK | | | |
| 5 | Install twelve (12) inches cellulose, loose-fill insulation in the attic flat area. | The high-area, flat ceiling above the main mechanical room of Area B. Refer to Drawing "B-1" & "B-2". | Hinge, insulate and air seal the flat-attic access hatch cover. Air seal penetrations in the attic floor. Install and insulation dam around the attic hatch. |
| 6 | Install six and three-quarters (6 3/4) inches of cellulose, dense pack insulation in the enclosed ceiling rafter bays, East & West side. | Enclosed, sloped-ceiling areas located at the wall connections, on each side of the high area attic flat. Refer to Drawing "B-1 & B-2". | Remove the fiberglass insulation from the enclosed ceiling; the rafter vents & soffit vents on the east side are to remain active. The rafter vents on the west side are to be removed; the rafter vents on the east side remain in place. |
| 7 | West Side Crawl Space: Insulate the roof deck with five (5) inches of urethane, high density spray insulation, similar to Item #1 above. | West side knee wall roof deck area only. Refer to Drawings "B-1" & "B-2". | Air seal MEP penetrations in the floor deck of the knee wall area. Close off proper vents at soffit and the ceiling connection to the attic flat. |
| 8 | East Side: Install twelve (12) inches of cellulose, loose-fill insulation in the floor area behind the knee wall. | East Side knee wall area only. Refer to Drawings "B-1" & "B-2". | The mechanical and piping equipment in this area does not provide access to spray foam the roof deck; Air Seal MEP penetrations; soffit ventilation and rafter vents are to remain active on the East side: Block outside air infiltration into the knee wall insulation at the soffit; Do not block the rafter vents with insulation at the soffit. |
| 9 | Reinforce the fiberglass insulation in the knee wall with insul-web material | East side knee wall only. Refer to Drawing "B-1" & "B-2". | Fiberglass insulation will remains in place due to very limited work space and accessibility. |

| AREA "C": ATTIC FLAT, WALLS, SLOPED CEILINGS, ROOF DECK | | | |
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| 10 | Install twelve (12) inches cellulose, loose-fill insulation in the attic flat areas. | The high flat ceiling area above the main room of Area C. Refer to Drawing "C-1 & "C-2". | Hinge, insulate and air seal the flat-attic access hatch cover. Air seal penetrations in the attic floor; Install an insulation dam around the attic hatch; air seal & protect the chimney bypass with Roxul insulation; construct an insulation pour stop at the drop-off to the lower level. |
| 11 | Install dense pack cellulose insulation in the N. & S. including insul-web fabric; | Area behind the knee wall and the walls common to the heated space. Refer to Drawings "C-1 & "C-2". | North & South Walls: Remove & relocate the fiberglass insulation and distribute, continuously and cross-hatched, on the lower attic flat area. |
| 12 | Spray foam the E wall that has 4 x 2 framing (2 x 4 on the flat) with three (3) inches of urethane, closed cell spray insulation, overlapping the dense pack cellulose walls three (3) inches min. | East-facing wall only; refer to Drawing "C-1". | East Wall: Remove & relocate the fiberglass insulation and distribute, continuously and cross-hatched, on the lower attic flat area. |
| 13 | Air seal the mechanical penetrations in the open areas. | Open, lower attic space at the tie-in to Area B. Refer to Drawings "C-1" & "C-2". | Adjust and distribute the existing fiberglass insulation. |
| 14 | Install twelve (12) inches cellulose, loose fill insulation on all flat areas at the tie-in, plus north and south of the enclosed area. | Open, lower attic space at the tie-in and North & South of the Mechanical Room. Refer to Drawings "C-1" & "C-2". | Between the E. and W. vertical walls, plus N. & S. of the enclosed Mechanical Space. |
| CRAWL SPACE: INSULATE FOUNDATION WALLS & PERIMETER JOIST | | | |

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| 15 | Remove the wire mesh and rigid foam board from the knee walls; install two (2) inches of urethane sprayed foam insulation on the knee walls, the perimeter joist areas and overlap the ground vapor barrier (V.B.) by a minimum of three (3) inches min. | All exposed wood, concrete and rubble foundation surfaces in the south section of the crawl space. Refer to Drawing "A-3". | Secure and air seal the top of the floor vapor barrier with spray foam, overlap a min. of 3". |
| 16 | Air seal the MEP penetrations in the first floor deck. | First floor deck, where visible through the rodent screen. Refer to Drawing "A-3". | Removal of the rodent screen required. |
| 17 | Insulate and air seal the crawl space door | Crawl Space entrance at the bulk head. Refer to Drawing "A-3". | 2" rigid foam board, plus door gasket kit & door latch hardware. |
| 18 | Infill four (4) holes in the vapor barrier. Clean and seal the poly terminations with 10 mil poly and poly tape, continuously. Overlap the tape onto the adjacent surfaces by a minimum of three (3) inches. | Crawl space floor. Refer to Drawing "A-3". | 10 mil poly, minimum & poly tape MUST be utilized |