SECTION 07200

INSULATION

PART 1 - GENERAL

1.1. DESCRIPTION

- A. Scope: Furnish and install insulation as indicated on the Drawings or specified herein
- B. Additional Requirements Specified Elsewhere
 - 1. Section 01340: Shop Drawings, Product Data and Samples
 - 2. Section 01600: Materials and Equipment
- C. Related Requirements Specified Elsewhere
 - 1. Section 03300: Cast-in-Place Concrete
 - 2. Section 04200: Unit Masonry
 - 3. Section 06100: Carpentry
 - 4. Section 13121: Prefabricated Metal Building

1.2. SUBMITTALS

A. Submit manufacturer's product data on all products furnished under this section in accordance with Section 01340

1.3. DELIVERY, STORAGE, AND HANDLING

A. Store insulation under cover to prevent weather damage

PART 2 - PRODUCTS

2.1. INSULATION MATERIALS

A. Batt Insulation

- 1. Kraft faced, mineral fiber, thermal blanket, conforming with ASTM C665, Type II
- 2. Walls: 16" wide, 3½" minimum thickness, minimum R Value = 13
- 3. Ceilings: 24" wide, 9½" minimum thickness, minimum R Value = 30
- 4. Application: Framed walls and ceiling as indicated on the drawings

B. Loose Fill Insulation

- 1. Insulation: Silicone treated Perlite loose fill
- 2. Conform with requirements of ASTM C549 and Federal Specification HH-1-574b
- 3. Manufacturer to be a member of the Perlite Institute, Inc.
- 4. Application: All ungrouted cells of exterior and interior masonry (CMU) walls

C. Foamed-In-Place Insulation

- 1. Two- or three-component foamed-in-place plastic insulation
- 2. Properly ratioed and mixed with catalyst and foamed by compressed air
- 3. Minimum R value = 4.0/inch
 - a. Conform to requirements of ASTM C177 or ASTM C518
- 4. Application: All ungrouted cells of exterior and interior masonry (CMU) walls
- 5. Acceptable products
 - a. Core-Fill 500 by Tailored Chemical Products
 - b. Polymaster R-501 by Polymaster, Inc.
 - c. Equivalent

D. Rigid Insulation

- 1. Insulation: 2" thick by minimum 24" wide DOW Styrofoam SM or equivalent
- 2. Adhesive: Styrofoam #7 or Styrofoam #11 brand mastic or equivalent
- 3. Application: Perimeter of exterior foundation walls, to depths shown on Drawings or required by building codes
 - At interior surface of exterior walls below slab on grade or otherwise shown on Drawings

PART 3 - EXECUTION

3.1. INSPECTION

A. Examine areas to receive insulation to assure conditions are satisfactory for insulation

3.2. INSTALLATION

A. Batt Insulation

- 1. Insulate ceilings and framed walls as indicated on the drawings
- 2. Vapor resistant covering to face toward the interior of building
- 3. Overlap attachment flanges of adjacent batts and attach to interior face of framing member with suitable fasteners
- 4. Batt insulation in place prior to start of wallboard installation
- 5. Replace any batts that are torn or damaged or do not fill entire space between roof trusses or wall studs; replace with whole undamaged pieces

B. Loose Fill Insulation

- 1. Install in all ungrouted cells of exterior and interior masonry (CMU) walls
- 2. Pour directly into CMU wall core at any convenient interval to completely fill each cell
- 3. Fill wall sections under openings before sills are placed
- 4. Permanently seal all holes and openings through which insulation could escape prior to installation of insulation

C. Foamed-In-Place Insulation

- 1. Install in all ungrouted cells of exterior and interior masonry (CMU) walls
- 2. Pressure inject into CMU wall cores to a uniform density, completely filling all voids, crevices and spaces
- 3. Fill wall sections under openings before sill is placed
- 4. Reseal all openings drilled for application per manufacturer's recommendations

D. Rigid Insulation

- 1. Install on entire perimeter, below grade, of all building foundation walls
- 2. Install insulation board to backing using adhesive methods recommended by manufacturer
- 3. Apply with adhesives and methods recommended by manufacturer

END OF SECTION