

SUPPLEMENTAL SPECIFICATION INFORMATION TO DIVISION 3 - CONCRETE AND DIVISION 7 - THERMAL AND MOISTURE PROTECTION			
<p>SUPPLEMENT TO DIVISION 03300 -</p> <p>A- FINISHING OF ARCHITECTURALLY EXPOSED FORMED CONCRETE:</p> <p>1.1 Concrete that will be exposed in the completed work shall receive smooth form finish conforming to ACI 301, and sandblast treatment.</p> <p>1. Apply sandblasted finish to exposed concrete surfaces at least 72 hours after placement of concrete. Coordinate with concrete placement schedule and formwork removal to ensure that surfaces to be blast finished are blasted at the same age for uniform results.</p> <p>2. Use an abrasive grit of proper type and gradation to provide brush sandblast finish - do not expose aggregates.</p> <p>3. Perform sand blast finishing in an continuous operation as possible utilizing the same work crew to maintain continuity of finish on each surface or within each area.</p> <p>B- WATERSTOPS:</p> <p>1.1 Provide flat, dumbbell type or center bulb type waterstops at construction joints, or other joints as indicated on the Structural Drawings.</p> <p>1. Waterstops shall be constructed of thermoplastic in accordance with The Corps of Engineers CRD-C572.</p> <p>2. Waterstops shall be continuous using splices as recommended by the manufacturer so as to prevent the passing of water through the joint.</p> <p>1.2 Preformed Joints: Install as per the manufacturers instruction the following material to form the control joint at all slabs on grade.</p> <p>1. Acceptable Products and Manufacturers:</p> <p>a. Keyed Kold Joint by the Burke Co., San Mateo California</p> <p>b. Kold Seal Zipper Strip by Vinylex Corporation Knoxville, Tennessee</p>	<p>SECTION 072100 - THERMAL INSULATION</p> <p>1.1. Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:</p> <p>1. Insulation under slabs-on-grade.</p> <p>2. Perimeter foundation wall insulation.</p> <p>3. Spray polyurethane foam insulation for gaps and voids.</p> <p>B. PRODUCTS</p> <p>2.1 PERIMETER INSULATION BOARD</p> <p>A. Material Properties:</p> <p>1. Rigid closed-cell extruded polystyrene foam board with vertical channels fabricated into one side, with sloping edges (long edge) and square edge (short edge).</p> <p>2. Compressive Strength (ASTM D 1621-94): min. 30 psi.</p> <p>3. R Value as per ASTM C 518-91: 10.0 (2" thick).</p> <p>4. Water Absorption: Max. 0.3% by volume, ASTM C 272.</p> <p>5. Surface Burning Characteristics:</p> <p>a. Flame Spread: 5.</p> <p>b. Smoke Developed: 165.</p> <p>8. Acceptable manufacturer's product: The Dow Chemical Company STYROFOAM Brand "PERIMATE" Extruded Polystyrene Foam Insulation.</p> <p>2.2 UNDERSLAB INSULATION BOARD</p> <p>A. Material Properties:</p> <p>1. Rigid closed-cell extruded polystyrene foam board with vertical channels fabricated into one side, with square edges.</p> <p>2. Compressive Strength (ASTM D 1621-94): 40 psi.</p> <p>3. R Value as per ASTM C 518-91: 5.0 (1" thick).</p> <p>4. Water Absorption: Max. 0.3% by volume, ASTM C 272.</p> <p>5. Surface Burning Characteristics:</p> <p>a. Flame Spread: 5.</p> <p>b. Smoke Developed: 165.</p> <p>8. Acceptable manufacturer's product: The Dow Chemical Company STYROFOAM Brand "HIGH-LOAD 40" Extruded Polystyrene Foam Insulation.</p> <p>2.3 ACCESSORIES</p> <p>1. Adhesive for Bonding Insulation: Provide the type recommended by the insulation manufacturer and adhesive manufacturer for the type insulation and substrate.</p> <p>2. Mechanical Anchors: Where required, type and size shown or, if not shown, staples, tape, adhesives, impaling clips and fasteners as recommended by the insulation manufacturer for the type of application shown and conditions of substrate.</p> <p>3.1. INSTALLATION OF BELOW-GRADE INSULATION</p> <p>a. On vertical surfaces, set rigid insulation units in adhesive applied according to manufacturer's written instructions. Use adhesive recommended by insulation manufacturer.</p> <p>1. If not otherwise indicated, extend insulation a minimum of 48 inches below exterior grade line.</p> <p>b. On horizontal surfaces, loosely lay rigid insulation units according to manufacturer's written instructions. Stagger and joints and tightly abut insulation units. Fill voids and gaps between boards with spray foam sealant compatible with insulation board.</p> <p>3.2. PROTECTION</p> <p>A. Protect installed insulation and vapor retarders from damage due to harmful weather exposures, physical abuse, and other causes.</p> <p>3.2. Protection:</p> <p>A. Protect installed vapor retarders from damage due to harmful weather exposures, physical abuse, and other causes.</p>	<p>SECTION 071326 - SELF-ADHERING SHEET WATERPROOFING</p> <p>1.1. Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:</p> <p>SELF-ADHERING SHEET WATERPROOFING</p> <p>1.2. Consult the manufacturer's standard details for specific conditions that will apply to this project. All work is to be in accordance with the manufacturer's requirements and published standard details.</p> <p>1.3 REFERENCES</p> <p>A. ASTM D 3767 Standard Practice for Rubber--Measurement of Dimensions</p> <p>B. ASTM D 412 Standard Test Method for Rubber Properties in Tension</p> <p>C. ASTM D 882 Standard Test Method for Tensile Properties of Thin Plastic Sheeting</p> <p>D. ASTM E 96 Standard Test Methods for Water Vapor Transmission of Materials</p> <p>E. ASTM D 570 Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Sheet Roofing Underlayment for Ice Dam Protection</p> <p>F. ASTM C 836 Standard Specification for High Solids, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Weaving Course</p> <p>G. ASTM D 903 Standard Test Method for Peel or Stripping Strength of Adhesive Bonds</p> <p>H. ASTM D 1876 Standard Test Method for Peel Release of Adhesives (T-Peel)</p> <p>I. ASTM E 154 Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover</p> <p>J. ASTM D 570 Standard Test Method for Water Absorption of Plastics</p> <p>K. ASTM D 5385 Standard Test Method for Hydrostatic Pressure Resistance of Waterproofing Membranes</p> <p>L. GSA-PBS 07121 Test for Decay from Soil Burial</p> <p>M. UL 790 Tests for Fire Resistance of Roof Covering Materials</p> <p>1.4 SYSTEM DESCRIPTION: Product provided by this Section is a self-adhesive membrane of not less than 60 mils thickness, consisting of 55 mils of rubberized asphalt membrane laminated to a 4 mil cross-laminated polyethylene film.</p> <p>1.5 SUBMITTALS</p> <p>A. General: Submit in accordance with Section 01300.</p> <p>B. Product Data: Submit manufacturer's product literature and installation instructions.</p> <p>071326</p> <p>C. Subcontractor's approval by Manufacturer: Submit document stating manufacturer's acceptance of subcontractor as an Approved Applicator for the specified materials.</p> <p>D. Warranty: Submit a sample warranty identifying the terms and conditions stated in Section 1.7.</p> <p>1.6 QUALITY ASSURANCE</p> <p>A. Applicator Qualifications: Applicator shall have 5 years of experience in applying the same or similar materials and shall be specifically approved in writing by the membrane manufacturer.</p> <p>B. Regulatory Requirements: Comply with applicable codes, regulations, ordinances, and laws regarding use and application of products that contain volatile organic compounds (VOC).</p> <p>C. Pre-Application Conference: Prior to beginning work, convene a conference to review conditions, installation procedures, schedules and coordination with other work.</p> <p>1.7 WARRANTY</p> <p>Upon completion and acceptance of the work required by this section, the manufacturer will issue a warranty agreeing to promptly replace defective materials installed by an approved applicator for a period of 5 years.</p> <p>1.8 DELIVERY, STORAGE, AND HANDLING</p> <p>A. Deliver materials to project site in original, factory-sealed, unopened containers bearing manufacturer's name and label intact and legible with following information.</p> <p>1. Name of material.</p> <p>2. Manufacturer's stock number and date of manufacture.</p> <p>3. Material safety data sheet.</p> <p>B. Store materials in protected and well ventilated area. Protect from damage from sunlight, weather, excessive temperatures and construction operations. Remove damaged material from the site and dispose of in accordance with local applicable regulations.</p>	<p>SECTION 071326 - SELF-ADHERING SHEET WATERPROOFING</p> <p>1.9 PROJECT CONDITIONS</p> <p>A. Do not apply membrane when surface temperature is below or incident weather conditions conflict with manufacturer's published requirements.</p> <p>B. Coordinate waterproofing work with other trades. The applicator shall have sole right of access to the specified areas for the time needed to complete the installation.</p> <p>C. Warn personnel against breathing of vapors and contact of material with skin or eyes. Wear applicable protective clothing and respiratory protection gear.</p> <p>D. Keep flammable products away from spark or flame. Do not allow the use of spark producing equipment during application and until all vapors have dissipated. Post "NO SMOKING" signs.</p> <p>E. Maintain work area in a neat and orderly condition, removing empty containers, rags, and rubbish daily from the site.</p> <p>PART 2-PRODUCTS21:MANUFACTURERS</p> <p>Provide CCW MiraDRI 860/861 Sheet Membrane Waterproofing as manufactured by Carlisle Construction and Waterproofing Incorporated, 900 Hensley Lane, Wylie, Texas 75098, Phone: (800) 527-7092 Fax: (972) 442-0078, or architect approved equal.</p> <p>2.2 PRODUCTS</p> <p>A. Self-Adhesive Sheet Membrane Waterproofing: Shall be CCW MiraDRI 860/861 consisting of a 56 mil rubberized-asphalt membrane laminated to 4 mil cross-laminated polyethylene film, and shall meet or exceed the following requirements:</p> <p>1. Thickness: 60 mils, ASTM D 3767</p> <p>2. Tensile Strength (Membrane): 325 psi, ASTM D 412</p> <p>3. Tensile Strength (Film): 5000psi, ASTM D 882</p> <p>4. Elongation: 350% minimum, ASTM D 4125 Permeance: 0.0</p> <p>5. Perm maximum, ASTM E 96</p> <p>6. Flexibility: 180° bend over 1 in. mandrel at 45°F: Unaffected, ASTM D 1970</p> <p>7. Crack Cycling at 25°F (100 cycles): Unaffected, ASTM C 836</p> <p>8. Peel Strength: 10.0 lbf/in ASTM D 903</p> <p>9. Lap Adhesion: 19.0 lbf/in ASTM D 1876</p> <p>10. Puncture Resistance: 60 lb (mm) ASTM E 154</p> <p>11. Soil Burial 16 weeks: No Effect, GSA-PBS 07121</p> <p>12. Water Absorption: 0.1% by vol., ASTM D 570</p> <p>13. Hydrostatic Head: 230 ft., ASTM C 5385</p> <p>B. For application temperatures between 25°F and 65°F, use CCW-861 Sheet Membrane and CCW-702, CCW-702LV, or CCW-715. For application temperatures above 40°F use CCW MiraDRI 860 sheet membrane and CCW-702, CCW-702LV, CCW-702WB, CCW-715, CCW-AWP, or Cav-Grip.</p> <p>2.3 ACCESSORY PRODUCTS</p> <p>A. Surface Primer: Shall be CCW-702, CCW-702LV, CCW-715, CCW-702WB, CCW-AWP or Cav-Grip.</p> <p>B. Mastic: Shall be CCW-704 Mastic.</p> <p>C. Sealants: Shall be CCW-703 Vertical Grade Liquidseal Membrane, CCW-LM-800XL, CCW-201 two-component Polyurethane Sealant or approved sealant by CCW.</p> <p>D. BackerRod: Shall be closed-cell polyethylene foam rod.</p> <p>E. Protection Course: Shall be CCW-Protection BoardH4 or HS, CCW-300H for horizontal surfaces or CCW-Protection BoardV or CCW-200V for vertical surfaces.</p> <p>F. Drainage Composite: Shall be CCW MiraDRAIN as recommended by the manufacturer for each condition.</p> <p>G. Perimeter Drainage System: Where required shall be CCW MiraDRAINHC</p> <p>PART3- EXECUTION</p> <p>3.1 INSPECTION</p> <p>A. Before any waterproofing work is started the waterproofing applicator shall thoroughly examine all surfaces for any deficiencies or unsatisfactory conditions detrimental to the proper completion of the work. Should any deficiencies exist, the architect, owner, or general contractor shall be notified in writing. Do not proceed with work until all deficiencies or unsatisfactory conditions are corrected.</p>

