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Stamp area with 'STATE EMPLOYEES' CREDIT UNION' logo and 'CREMA CONSULTING' stamp. A table for 'ISSUED FOR BID' with columns: No, Issue/Revision/Submission, Date. A large watermark 'WWW.WALLTOIDRAWING.COM' is overlaid on the page.

GRAPHIC SCALE: 1 inch = 1/8" H. Horiz. Scale showing 0, 1, 2, 3, 4, 5 inches.

STATE EMPLOYEES' CREDIT UNION - CHARLOTTE - ALBEMARLE RD. REMOTE ATM ADDITIONS SPECIFICATIONS. PROJECT, SHEET TITLE, PROJECT MANAGER (BS), FIELD SURVEY DATE, CHECKED BY (DS), DRAWING DATE (02/07/2020), DRAWN BY (AA), JOB #, SHEET (G004), TOTAL SHEETS (11 of 14).

SECTION 07 21 00 - GENERAL PART 1 - SUMMARY 1.1 HIGH-BUILD, VAPOR-BARRIERING, FLUOR-APPLIED AIR BARRIERS

SECTION 07 22 00 - JOINT SEALANTS PART 1 - MATERIALS 2.1 AIR-BARRIER ASSEMBLY: AIR-LEAKAGE MAXIMUM 0.04 CFM/50 SQ. FT. OF SURFACE AREA AT 1.57 LBS/SQ. FT. WHEN TESTED ACCORDING TO ASTM E 2287.

SECTION 07 23 00 - HIGH-BUILD AIR BARRIERS, VAPOR RETARDING PART 1 - MATERIALS 2.1 AIR-BARRIER ASSEMBLY: AIR-LEAKAGE MAXIMUM 0.04 CFM/50 SQ. FT. OF SURFACE AREA AT 1.57 LBS/SQ. FT. WHEN TESTED ACCORDING TO ASTM E 2287.

SECTION 07 24 00 - ACCESSORY MATERIALS PART 1 - MATERIALS 2.1 AIR-BARRIER ASSEMBLY: AIR-LEAKAGE MAXIMUM 0.04 CFM/50 SQ. FT. OF SURFACE AREA AT 1.57 LBS/SQ. FT. WHEN TESTED ACCORDING TO ASTM E 2287.

SECTION 07 25 00 - INSULATION STANDOFFS: SPACER FABRICATED FROM GALVANIZED MILD-STEEL SHEET FOR FITTING OVER SPICE OF INSULATION ANCHORS TO MAINTAIN AIR SPACE OF 1 INCH (25 MM) ± INCHES (50 MM) ± (1 INCHES (76 MM) ± BETWEEN FACE OF INSULATION AND SUBSTRATE TO WHICH ANCHOR IS ATTACHED).

SECTION 07 26 - FLUID-APPLIED MEMBRANE BARRIERS PART 1 - GENERAL 1.01 SUMMARY A. SECTION INCLUDES: 1. HIGH-BUILD, VAPOR-BARRIERING, FLUOR-APPLIED AIR BARRIERS

SECTION 07 26 - FLUID-APPLIED MEMBRANE BARRIERS PART 1 - GENERAL 1.02 DEFINITIONS A. AIR-BARRIER MATERIAL: A PRIMARY ELEMENT THAT PROVIDES A CONTINUOUS BARRIER TO THE MOVEMENT OF AIR.

SECTION 07 26 - FLUID-APPLIED MEMBRANE BARRIERS PART 1 - GENERAL 1.03 INSULATION FASTENERS A. ADHESIVE APPLIED: SPINDLE-TYPE ANCHORS, PLATE WELDED TO PROJECTING SPINDLE; CAPABLE OF HOLDING INSULATION OF SPECIFIED THICKNESS SECURELY IN POSITION WITH SELF-LOADING WASHER IN PLACE.

SECTION 07 26 - FLUID-APPLIED MEMBRANE BARRIERS

Table with 4 columns: PROPERTY, TEST METHOD/STANDARD, VALUE, and VALUE. Rows include FOAM COMP. STRENGTH, LINEAR COEF. OF EXPAN. @ 3 YEARS, FLEXURAL STRENGTH, WATER VAPOUR PERMEABILITY, DIMENSIONAL STABILITY, and BASIS OF DESIGN FOR INSULATION UNITS.

1. DRAINAGE COMPOSITE PANELS: SHALL BE A THREE-DIMENSIONAL, HIGH-IMPACT RESISTANT POLYMERIC GRID WITH MONOLAYER DRAINAGE FABRIC BONDED TO THE GRID PANEL. FILTER FABRIC SHALL HAVE A PERMEABILITY COEFFICIENT OF 0.015 CM/SEC.

2.03 INSULATION FASTENERS A. ADHESIVE APPLIED: SPINDLE-TYPE ANCHORS, PLATE WELDED TO PROJECTING SPINDLE; CAPABLE OF HOLDING INSULATION OF SPECIFIED THICKNESS SECURELY IN POSITION WITH SELF-LOADING WASHER IN PLACE.

3. PLATE PERFORATED: GALVANIZED CARBON-STEEL SHEET, 0.030 INCH (0.762 MM) THICK BY 2 INCHES (50.8 MM) SQUARE. SPINDLES: COPPER-COATED, LOW-CARBON STEEL, FULLY ANNEALED; 0.185 INCH (2.67 MM) IN DIAMETER; LENGTH TO SUIT DEPTH OF INSULATION.

4. ADHESIVELY ATTACHED, ANGLE-SHAPED, SPINDLE-TYPE ANCHORS: ANGLE WELDED TO PROJECTING SPINDLE; CAPABLE OF HOLDING INSULATION OF SPECIFIED THICKNESS SECURELY IN POSITION WITH SELF-LOADING WASHER IN PLACE.

5. ANGLE FORMED FROM 0.030 INCH (0.762 MM) THICK, PERFORATED, GALVANIZED CARBON-STEEL SHEET WITH EACH LEG 1 INCHES (25.4 MM) SQUARE. SPINDLE: COPPER-COATED, LOW-CARBON STEEL, FULLY ANNEALED; 0.185 INCH (2.67 MM) IN DIAMETER; LENGTH TO SUIT DEPTH OF INSULATION.

6. INSULATION STANDOFFS: SPACER FABRICATED FROM GALVANIZED MILD-STEEL SHEET FOR FITTING OVER SPICE OF INSULATION ANCHORS TO MAINTAIN AIR SPACE OF 1 INCH (25 MM) ± INCHES (50 MM) ± (1 INCHES (76 MM) ± BETWEEN FACE OF INSULATION AND SUBSTRATE TO WHICH ANCHOR IS ATTACHED).

7. ANCHOR ADHESIVE: PRODUCT WITH DEMONSTRATED CAPABILITY TO BOND INSULATION ANCHORS SECURELY TO SUBSTRATES WITHOUT DAMAGING INSULATION, FASTENERS, OR SUBSTRATES.

2.02 ACCESSORIES INSULATION FOR MISCELLANEOUS VOIDS 1. GLASS-FIBER INSULATION ASTM C 104, TYPE II, LOOSE FILL WITH MAXIMUM FIBRE SPREAD AND SMOKE DEVELOPED INDEXES OF 5, PER ASTM E 84.

2. SPRAY POLYURETHANE FOAM INSULATIONS ASTM C 1022, TYPE II, CLOSED CELL WITH MAXIMUM FIBRE SPREAD AND SMOKE DEVELOPED INDEXES OF 75 AND 450, RESPECTIVELY, PER ASTM E 84.

3. ADHESIVE FOR BONDING INSULATIONS: PRODUCT COMPATIBLE WITH INSULATION AND AIR AND WATER BARRIER MATERIALS AND WITH DEMONSTRATED CAPABILITY TO BOND INSULATION SECURELY TO SUBSTRATES WITHOUT DAMAGING INSULATION AND SUBSTRATES.

3.01 PREPARATION A. CLEAN SUBSTRATES OF SUBSTANCES THAT ARE HARMFUL TO INSULATION, INCLUDING REMOVING PROJECTIONS CAPABLE OF FUNCTIONING INSULATION OR VAPOR RETARDERS, OR THAT INTERFERE WITH INSULATION ACTIVATION.

3.02 INSTALLATION, GENERAL A. COMPLY WITH INSULATION MANUFACTURER'S WRITTEN INSTRUCTIONS APPLICABLE TO PRODUCTS AND APPLICATIONS. B. INSTALL INSULATION THAT IS UNDAMAGED, DRY, AND UNCOLORED AND THAT HAS NOT BEEN LEFT EXPOSED TO ICE, FROST, OR SNOW AT ANY TIME.

3.03 CLEANING AND PROTECTION A. PROTECT AIR-BARRIER SYSTEM FROM DAMAGE DURING APPLICATION AND REMAINDER OF CONSTRUCTION PERIOD, ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

SECTION 07 26 - FLUID-APPLIED MEMBRANE BARRIERS

3.04 ACTION SUBMITTALS A. PRODUCT DATA FOR EACH TYPE OF PRODUCT. 1. INCLUDE MANUFACTURER'S WRITTEN INSTRUCTIONS FOR EVALUATING, PREPARING, AND TREATING EACH SUBSTRATE; TECHNICAL DATA: DRY FILM THICKNESS, AND TESTED PHYSICAL AND PERFORMANCE PROPERTIES OF PRODUCTS.

3.05 INFORMATIONAL SUBMITTALS A. QUALIFICATION DATA FOR INSTALLER. B. PRODUCT CERTIFICATIONS: FROM AIR BARRIER MANUFACTURER, CERTIFYING COMPATIBILITY OF AIR BARRIERS AND ACCESSORY MATERIALS WITH PRODUCT MATERIALS THAT CONNECT TO OR THAT COME IN CONTACT WITH THE BARRIER.

3.06 QUALITY ASSURANCE A. INSTALLER QUALIFICATION: AN ENTRY THAT EMPLOYS INSTALLERS AND SUPERVISORS WHO ARE TRAINED AND APPROVED BY MANUFACTURER.

3.07 DELIVERY, STORAGE, AND HANDLING A. REMOVE AND REPLACE LIQUID MATERIALS THAT CANNOT BE APPLIED WITHIN THEIR STATED SHELF LIFE. B. PROTECT STORED MATERIALS FROM DIRECT SUNLIGHT.

3.08 FIELD CONDITIONS A. ENVIRONMENTAL LIMITATIONS: APPLY AIR BARRIER WITHIN THE RANGE OF AMBIENT AND SUBSTRATE TEMPERATURES RECOMMENDED IN WRITING BY AIR-BARRIER MANUFACTURER.

3.09 PARTS - PRODUCTS 2.01 MATERIALS A. SOURCE LIMITATIONS: OBTAIN PRIMARY AIR-BARRIER MATERIALS AND AIR-BARRIER ACCESSORIES FROM SINGLE SOURCE FROM SINGLE MANUFACTURER.

2.02 PERFORMANCE REQUIREMENTS A. AIR-BARRIER PERFORMANCE: AIR-BARRIER ASSEMBLY AND SEALS WITH ADJACENT CONSTRUCTION SHALL BE CAPABLE OF PERFORMING AS A CONTINUOUS AIR BARRIER AND AS A LIQUID-WATER DRAINAGE PLANE, FLASHED TO DISCHARGE TO THE EXTERIOR, PREVENTING CONDENSATION OR WATER PENETRATION. AIR-BARRIER ASSEMBLY SHALL BE CAPABLE OF ACCOMMODATING SUBSTRATE MOVEMENT AND OF SEALING SUBSTRATE EXPANSION AND CONTRACTION JOINTS, CONSTRUCTION MATERIAL CHANGES, PENETRATIONS, AND TRANSITIONS AT PERMEABLE CONDITIONS WITHOUT DEGRADATION AND AIR LEAKAGE EXCEEDING SPECIFIED LIMITS.

2.03 HIGH-BUILD AIR BARRIERS, VAPOR RETARDING A. HIGH-BUILD VAPOR RETARDING AIR BARRIER: ADOPTED BITUMINOUS MEMBRANE WITH AN INSTALLED DRY FILM THICKNESS, ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, OF 35 MILS. OR THICKER OVER SMOOTH, VPO-FREE SUBSTRATES. 1. MODIFIED BITUMINOUS TYPE: a. BASIS OF DESIGN PRODUCT: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE W. R. MEADOWS, INC. AIR-SHIELD LM OR A COMPARABLE PRODUCT BY ONE OF THE FOLLOWING: 1) CAMULUX COATINGS & WATERPROOFING INC. 2) HENRY COMPANY, SEALANTS DIVISION 3) TREMOLO INCORPORATED.

2. PHYSICAL AND PERFORMANCE PROPERTIES: a. AIR PERMEANCE: MAXIMUM 0.04 CFM/50 SQ. FT. OF SURFACE AREA AT 1.57 LB/SQ. FT. PRESSURE DIFFERENCE; ASTM E 2178. b. VAPOR PERMEANCE: MAXIMUM 5 PERCENT ASTM E 969-04A DESCANT METHOD. c. ULTIMATE ELONGATION: MINIMUM 500 PERCENT; ASTM D 414, DIE C. d. FIRE PROTECTION CHARACTERISTICS: PASSES NFPA 280 TESTING AS PART OF APPROVED ASSEMBLY FOR WALL SECTIONS OVER EXTERIOR GRADE. e. UV RESISTANCE: CAN BE EXPOSED TO SUNLIGHT FOR 30 DAYS UNDERMANUFACTURER'S WRITTEN INSTRUCTIONS.

2.04 ACCESSORY MATERIALS A. REQUIREMENT: JOINT PRIMERS, TRANSITION STRIPS, TERMINATION STRIPS, REINFORCING FABRIC AND STRIPS, JOINT BEAMS, COULMING ANCHORS, TIES, FLASHINGS, SHEETS AND METAL TERMINATION BARS, TERMINATION STRIPS, SUBS TO BE WITH PAINT, JOINTS, JOINTS, TAPES, FOAM SEALANTS, LAF SEALANTS, AND OTHER ACCESSORY MATERIALS THAT ARE RECOMMENDED IN WRITING BY AIR-BARRIER MANUFACTURER TO PRODUCE A CONTINUOUS AIR-BARRIER ASSEMBLY AND THAT ARE COMPATIBLE WITH PRIMARY AIR-BARRIER MATERIAL AND ADJACENT CONSTRUCTION TO WHICH THEY MAY SEAL. B. PRIMER: LIQUID WATER-BASE PRIMER RECOMMENDED FOR SUBSTRATE BY AIR-BARRIER MATERIAL MANUFACTURER. 1. BASIC OF DESIGN PRODUCT: MEL-PRIME™ IN WATER-BASE PRIMER BY W. R. MEADOWS, INC. FLASHING AND TRANSITION MEMBRANE: SELF-ADHESIVE POLYIMINE MEMBRANE HAVING A THICKNESS OF 40 MILS. RECOMMENDED FOR SUBSTRATE BY AIR-BARRIER MATERIAL MANUFACTURER.

2. REINFORCING FABRIC: PRODUCT; AIR-BARRIER THROUGH WALL FLASHING BY W. R. MEADOWS, INC. C. JOINT FILLS: FULL CONTACT APPLIED, SINGLE COMPONENT, FLASHING MEMBRANE FOR ROUGH OPENINGS, INCLUDING RECOMMENDED FOR SUBSTRATE BY AIR-BARRIER MATERIAL MANUFACTURER. BASIS OF DESIGN PRODUCT: AIR-SHIELD LIQUID FLASHING BY W. R. MEADOWS, INC. COULMING MASTIC: MASTIC FOR SEALING PENETRATIONS AND TERMINATIONS OF MEMBRANE. 1. BASIS OF DESIGN PRODUCT: PORTING MASTIC BY W. R. MEADOWS, INC. D. DETAILING MEMBRANE: NON-SLUMP WATERPROOFING MASTIC FOR JOINT DETAILING. 1. BASIS OF DESIGN PRODUCT: BEND BY W. R. MEADOWS, INC.

3.05 CLEANING AND PROTECTION A. PROTECT AIR-BARRIER SYSTEM FROM DAMAGE DURING APPLICATION AND REMAINDER OF CONSTRUCTION PERIOD, ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

3.06 EXAMINATION A. EXAMINE SUBSTRATE, AREAS, AND CONDITIONS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS AND OTHER CONDITIONS AFFECTING PERFORMANCE OF THE WORK. 1. VERIFY THAT SUBSTRATES ARE SOUND AND FREE OF OIL, GREASE, DIRT, EXCESS MORTAR, OR OTHER CONTAMINANTS. 2. VERIFY THAT SUBSTRATES HAVE DRIED AND AGED FOR MINIMUM TIME RECOMMENDED IN WRITING BY AIR-BARRIER MANUFACTURER. 3. VERIFY THAT SUBSTRATES ARE VISIBLY DRY AND FREE OF MOISTURE. 4. VERIFY THAT MASONRY JOINTS ARE FLASH AND COMPLETELY FILLED WITH MORTAR.

B. PROCESS WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. C. CLEAN SPILLS, STAINS, AND SOLING FROM CONSTRUCTION THAT WOULD BE EXPOSED IN THE COMPLETED WORK USING CLEANING AGENTS AND PROCEDURES RECOMMENDED IN WRITING BY MANUFACTURER OF AFFECTED CONSTRUCTION.

SECTION 07 41 13 - STANDING-SEAM METAL ROOF PANELS

3.02 SURFACE PREPARATION A. CLEAN, PREPARE, TREAT, FILL, AND SEAL SUBSTRATE AND JOINTS AND CRACKS IN SUBSTRATE ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AND DETAILS. PROVIDE CLEAN, DUST-FREE, AND DRY SUBSTRATE FOR AIR-BARRIER APPLICATION. B. MASK OFF ADJOINING SURFACES NOT COVERED BY AIR BARRIER TO PREVENT SPILLAGE AND OVERSPRAY AFFECTING OTHER CONSTRUCTION.

3.03 ACCESSORIES INSTALLATION A. INSTALL ACCESSORY MATERIALS ACCORDING TO AIR-BARRIER MANUFACTURER'S WRITTEN INSTRUCTIONS AND DETAILS TO FORM A SEAL WITH ADJACENT CONSTRUCTION AND ENSURE CONTINUITY OF AIR AND WATER BARRIER. 1. COORDINATE THE INSTALLATION OF AIR BARRIER WITH INSTALLATION OF ROOFING MEMBRANE AND BASE FLASHING TO ENSURE CONTINUITY OF AIR BARRIER WITH ROOFING MEMBRANE.

3.04 PRODUCTS A. STANDING SEAM METAL ROOF PANELS: 1. PROFILE: VERTICAL SHIP-NAP JOINT. 2. MATERIAL: METALLIC-COATED STEEL SHEET. 3. EXTERIOR FINISH: TWO-COAT POLYESTER. B. ACCESSORIES: FLASHING AND TRIM. 3.05 MATERIALS A. SELF-ADHERING, HIGH-TEMPERATURE SHEET UNDERLAYMENT OVER ENTIRE ROOF.

3.06 INSTALLATION A. WATER-TIGHT INSTALLATION: SEALANT OR TAPE AT JOINTS. END OF SECTION 07 41 13. SECTION 07 92 00 - JOINT SEALANT PART 1 - PRECONSTRUCTION COMPATIBILITY AND PRESSION TESTING. B. INSTALL WARRANTY: TWO YEARS. C. SEALANT MANUFACTURER'S WARRANTY: FIVE YEARS.

3.07 MATERIALS A. SELF-ADHERING, HIGH-TEMPERATURE SHEET UNDERLAYMENT OVER ENTIRE ROOF. B. WATER-TIGHT INSTALLATION: SEALANT OR TAPE AT JOINTS. END OF SECTION 07 92 00.

3.08 INSTALLATION A. WATER-TIGHT INSTALLATION: SEALANT OR TAPE AT JOINTS. END OF SECTION 07 92 00. SECTION 08 11 13 - HOLLOW METAL DOORS AND FRAMES PART 1 - SUMMARY A. SECTION INCLUDES HOLLOW-METAL WORK.

1.2 DEFINITIONS A. MINOR: MINIMUM THICKNESS OF BASE METAL WITHOUT COATINGS ACCORDING TO ASTM A 2136, 2137 OR SD 1.203. B. HOLLOW-METAL DOORS AND FRAMES: 1.1 NON-FIRE-RATED STEEL DOORS. a. BETWEEN DOOR AND FRAME JAMBS AND HEAD: 1/8 INCH PLUS OR MINUS 1/32 INCH. b. AT BOTTOM OF DOOR: 1/8 INCH PLUS OR MINUS 1/32 INCH. c. BETWEEN DOOR FACE AND STOP: 1/16 INCH TO 1/8 INCH PLUS OR MINUS 1/32 INCH.

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1.3 ACTION SUBMITTALS A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT. B. SHOP DRAWINGS: INCLUDE ELEVATIONS, DOOR EDGE DETAILS, FRAME PROFILES, METAL THICKNESSES, PREPARATIONS FOR HARDWARE, AND OTHER DETAILS. C. SCHEDULE: PREPARED BY OR UNDER THE SUPERVISION OF SUPPLIER, USING SAME REFERENCE MEMBERS FOR DETAILS AND OPENINGS AS THOSE ON DRAWINGS.

1.4 MANUFACTURERS A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING: 1. CULDEX DOOR PRODUCTS, AN ASSA ABLOY GROUP COMPANY. 2. CLURUS COMPANY, AN ASSA ABLOY GROUP COMPANY. 3. DEANSTEEL. 4. PEXER INDUSTRIES, INC. 5. HETPAC DOORS AND FRAMES. 6. STEELCRAFT, AN INGENIERIA AND COMPANY.

1.5 REGULATORY REQUIREMENTS A. FIRE-RATED ASSEMBLIES: COMPLY WITH NFPA 80 AND LISTED AND LABELED BY A QUALIFIED TESTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION FOR FIRE-PROTECTION RATINGS INDICATED, BASED ON TESTING AT POSITIVE PRESSURE ACCORDING TO NFPA 252 OR UL 10C.

1.6 EXTERIOR DOORS AND FRAMES A. RELEVANT DOORS AND FRAMES: SD 1.203, LEVEL 2. B. PHYSICAL PERFORMANCE: LEVEL B ACCORDING TO SD 1.203.4. C. DOORS: 1. TYPE: AS INDICATED IN THE DOOR AND FRAME SCHEDULE. 2. THE THICKNESS: 1 3/4 INCHES. 3. FACE: UNCOATED, COLD-ROLLED STEEL SHEET, MINIMUM THICKNESS OF 0.042 INCH. 4. EDGE CONSTRUCTION: MODEL 1, BUTL FLUSH. 5. CORE: MANUFACTURER'S STANDARD.

1.7 INTERIOR DOORS AND FRAMES A. RELEVANT DOORS AND FRAMES: SD 1.203, LEVEL 2. B. PHYSICAL PERFORMANCE: LEVEL B ACCORDING TO SD 1.203.4. C. DOORS: 1. TYPE: AS INDICATED IN THE DOOR AND FRAME SCHEDULE. 2. THE THICKNESS: 1 3/4 INCHES. 3. FACE: UNCOATED, COLD-ROLLED STEEL SHEET, MINIMUM THICKNESS OF 0.042 INCH. 4. EDGE CONSTRUCTION: MODEL 1, BUTL FLUSH. 5. CORE: MANUFACTURER'S STANDARD.

1.8 HARDWARE A. FINAL ADJUSTMENTS: CHECK AND REPAIR/OPERATING HARDWARE ITEMS IMMEREDIATELY BEFORE FINAL INSPECTION. LEAVE WORK IN COMPLETE AND PROPER OPERATING CONDITION. REMOVE AND REPLACE DEFECTIVE WORK, INCLUDING HOLLOW-METAL WORK THAT IS WARPED, BOWED, OR OTHERWISE UNSATISFACTORY. B. REMOVE GROUT AND OTHER BONDING MATERIAL FROM HOLLOW-METAL WORK IMMEDIATELY AFTER INSTALLATION. C. PRIME-COAT TOUCHUP: IMMEDIATELY AFTER ERECTION, SAND AND SMOOTH RUSTED OR DAMAGED AREAS OF PRIME COAT AND APPLY TOUCHUP OF COMPATIBLE AIR-DRYING, RUST-INHIBITIVE PRIMER.

SECTION 08 11 13 - HOLLOW METAL DOORS AND FRAMES

1.2 DEFINITIONS A. MINOR: MINIMUM THICKNESS OF BASE METAL WITHOUT COATINGS ACCORDING TO ASTM A 2136, 2137 OR SD 1.203. B. HOLLOW-METAL DOORS AND FRAMES: 1.1 NON-FIRE-RATED STEEL DOORS. a. BETWEEN DOOR AND FRAME JAMBS AND HEAD: 1/8 INCH PLUS OR MINUS 1/32 INCH. b. AT BOTTOM OF DOOR: 1/8 INCH PLUS OR MINUS 1/32 INCH. c. BETWEEN DOOR FACE AND STOP: 1/16 INCH TO 1/8 INCH PLUS OR MINUS 1/32 INCH.

1.3 ACTION SUBMITTALS A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT. B. SHOP DRAWINGS: INCLUDE ELEVATIONS, DOOR EDGE DETAILS, FRAME PROFILES, METAL THICKNESSES, PREPARATIONS FOR HARDWARE, AND OTHER DETAILS. C. SCHEDULE: PREPARED BY OR UNDER THE SUPERVISION OF SUPPLIER, USING SAME REFERENCE MEMBERS FOR DETAILS AND OPENINGS AS THOSE ON DRAWINGS.

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1.6 EXTERIOR DOORS AND FRAMES A. RELEVANT DOORS AND FRAMES: SD 1.203, LEVEL 2. B. PHYSICAL PERFORMANCE: LEVEL B ACCORDING TO SD 1.203.4. C. DOORS: 1. TYPE: AS INDICATED IN THE DOOR AND FRAME SCHEDULE. 2. THE THICKNESS: 1 3/4 INCHES. 3. FACE: UNCOATED, COLD-ROLLED STEEL SHEET, MINIMUM THICKNESS OF 0.042 INCH. 4. EDGE CONSTRUCTION: MODEL 1, BUTL FLUSH. 5. CORE: MANUFACTURER'S STANDARD.

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1.8 HARDWARE A. FINAL ADJUSTMENTS: CHECK AND REPAIR/OPERATING HARDWARE ITEMS IMMEREDIATELY BEFORE FINAL INSPECTION. LEAVE WORK IN COMPLETE AND PROPER OPERATING CONDITION. REMOVE AND REPLACE DEFECTIVE WORK, INCLUDING HOLLOW-METAL WORK THAT IS WARPED, BOWED, OR OTHERWISE UNSATISFACTORY. B. REMOVE GROUT AND OTHER BONDING MATERIAL FROM HOLLOW-METAL WORK IMMEDIATELY AFTER INSTALLATION. C. PRIME-COAT TOUCHUP: IMMEDIATELY AFTER ERECTION, SAND AND SMOOTH RUSTED OR DAMAGED AREAS OF PRIME COAT AND APPLY TOUCHUP OF COMPATIBLE AIR-DRYING, RUST-INHIBITIVE PRIMER.

1.9 FABRICATION A. FABRICATE HOLLOW-METAL WORK TO RECEIVE AND BRIDGE OF BOLTS, WARP, OR BUCKLE ACCORDING TO HOLLOW-METAL WORK DESIGN AND MANUFACTURER'S DESIGN FOR METAL THICKNESS. WHERE NECESSARY, CUT A RECESS INTO METAL FABRICATION PLANE TO ENSURE PROPER SEATING OF PANEL. CLEARLY IDENTIFY WORK THAT CANNOT BE PERMANENTLY REMOVED BEFORE SHIPMENT. B. INTERIOR METAL FRAMES: FABRICATE IN SECTIONS DUE TO SHIPPING OR INSTALLATION LIMITATIONS. PROVIDE ANCHORING PLATES OR ANGLES AT EACH JOINT. FABRICATE OF SAME THICKNESS AS FRAMES.

1.10 FINISHES A. PRIME FINISH: CLEAN, PRETREAT, AND APPLY MANUFACTURER'S STANDARD PRIMER. 1. SHEET PRIMER: SIX ANS 10. B. INTERIOR FINISHES: 1. SET FRAMES ACCURATELY IN POSITION; PLUMBED, ALIGNED, AND BRACED SECURELY UNTIL PERMANENT ANCHORS ARE SET. AFTER WALL CONSTRUCTION IS COMPLETE, REMOVE TEMPORARY BRACKS, LEAVING SURFACES SMOOTH AND UNBROKEN. 2. REMOVE GROUT AND OTHER BONDING MATERIAL FROM HOLLOW-METAL WORK IMMEDIATELY AFTER INSTALLATION. 3. PRIME-COAT TOUCHUP: IMMEDIATELY AFTER ERECTION, SAND AND SMOOTH RUSTED OR DAMAGED AREAS OF PRIME COAT AND APPLY TOUCHUP OF COMPATIBLE AIR-DRYING, RUST-INHIBITIVE PRIMER. 4. SQUARENESS: PLUS OR MINUS 1/16 INCH MEASURED AT DOOR BARRETT UN ALINE 90 DEGREES FROM JAMB PARALLEL TO FRAME HEAD. 5. ALIGNMENT: PLUS OR MINUS 1/16 INCH MEASURED AT JAMBS ON A HORIZONTAL LINE PARALLEL TO PLANE OF WALL. 6. TWIST: PLUS OR MINUS 1/16 INCH MEASURED AT OPPOSITE FACE CORNERS OF JAMBS OR PARALLEL LINES, AND PERPENDICULAR TO PLANE OF WALL. 7. PLUMBNESS: PLUS OR MINUS 1/16 INCH MEASURED AT JAMBS AT FLOOR. 8. HOLLOW-METAL DOORS: FIT HOLLOW-METAL DOORS ACCURATELY IN FRAMES, WITH CLEARANCES SPECIFIED BELOW. SHIM AS NECESSARY. 1. NON-FIRE-RATED STEEL DOORS. a. BETWEEN DOOR AND FRAME JAMBS AND HEAD: 1/8 INCH PLUS OR MINUS 1/32 INCH. b. AT BOTTOM OF DOOR: 1/8 INCH PLUS OR MINUS 1/32 INCH. c. BETWEEN DOOR FACE AND STOP: 1/16 INCH TO 1/8 INCH PLUS OR MINUS 1/32 INCH.

2.01 MATERIALS A. SOURCE LIMITATIONS: OBTAIN PRIMARY AIR-BARRIER MATERIALS AND AIR-BARRIER ACCESSORIES FROM SINGLE SOURCE FROM SINGLE MANUFACTURER. B. VOC CONTENT: 250 G/L OR LESS. 2.02 PERFORMANCE REQUIREMENTS A. AIR-BARRIER PERFORMANCE: AIR-BARRIER ASSEMBLY AND SEALS WITH ADJACENT CONSTRUCTION SHALL BE CAPABLE OF PERFORMING AS A CONTINUOUS AIR BARRIER AND AS A LIQUID-WATER DRAINAGE PLANE, FLASHED TO DISCHARGE TO THE EXTERIOR, PREVENTING CONDENSATION OR WATER PENETRATION. AIR-BARRIER ASSEMBLY SHALL BE CAPABLE OF ACCOMMODATING SUBSTRATE MOVEMENT AND OF SEALING SUBSTRATE EXPANSION AND CONTRACTION JOINTS, CONSTRUCTION MATERIAL CHANGES, PENETRATIONS, AND TRANSITIONS AT PERMEABLE CONDITIONS WITHOUT DEGRADATION AND AIR LEAKAGE EXCEEDING SPECIFIED LIMITS. B. AIR-BARRIER ASSEMBLY AIR LEAKAGE: MAXIMUM 0.04 CFM/50 SQ. FT. OF SURFACE AREA AT 1.57 LB/SQ. FT. WHEN TESTED ACCORDING TO ASTM E 2287.

2.03 HIGH-BUILD AIR BARRIERS, VAPOR RETARDING A. HIGH-BUILD VAPOR RETARDING AIR BARRIER: ADOPTED BITUMINOUS MEMBRANE WITH AN INSTALLED DRY FILM THICKNESS, ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, OF 35 MILS. OR THICKER OVER SMOOTH, VPO-FREE SUBSTRATES. 1. MODIFIED BITUMINOUS TYPE: a. BASIS OF DESIGN PRODUCT: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE W. R. MEADOWS, INC. AIR-SHIELD LM OR A COMPARABLE PRODUCT BY ONE OF THE FOLLOWING: 1) CAMULUX COATINGS & WATERPROOFING INC. 2) HENRY COMPANY, SEALANTS DIVISION 3) TREMOLO INCORPORATED.

2. PHYSICAL AND PERFORMANCE PROPERTIES: a. AIR PERMEANCE: MAXIMUM 0.04 CFM/50 SQ. FT. OF SURFACE AREA AT 1.57 LB/SQ. FT. PRESSURE DIFFERENCE; ASTM E 2178. b. VAPOR PERMEANCE: MAXIMUM 5 PERCENT ASTM E 969-04A DESCANT METHOD. c. ULTIMATE ELONGATION: MINIMUM 500 PERCENT; ASTM D 414, DIE C. d. FIRE PROTECTION CHARACTERISTICS: PASSES NFPA 280 TESTING AS PART OF APPROVED ASSEMBLY FOR WALL SECTIONS OVER EXTERIOR GRADE. e. UV RESISTANCE: CAN BE EXPOSED TO SUNLIGHT FOR 30 DAYS UNDERMANUFACTURER'S WRITTEN INSTRUCTIONS.

2.04 ACCESSORY MATERIALS A. REQUIREMENT: JOINT PRIMERS, TRANSITION STRIPS, TERMINATION STRIPS, REINFORCING FABRIC AND STRIPS, JOINT BEAMS, COULMING ANCHORS, TIES, FLASHINGS, SHEETS AND METAL TERMINATION BARS, TERMINATION STRIPS, SUBS TO BE WITH PAINT, JOINTS, JOINTS, TAPES, FOAM SEALANTS, LAF SEALANTS, AND OTHER ACCESSORY MATERIALS THAT ARE RECOMMENDED IN WRITING BY AIR-BARRIER MANUFACTURER TO PRODUCE A CONTINUOUS AIR-BARRIER ASSEMBLY AND THAT ARE COMPATIBLE WITH PRIMARY AIR-BARRIER MATERIAL AND ADJACENT CONSTRUCTION TO WHICH THEY MAY SEAL. B. PRIMER: LIQUID WATER-BASE PRIMER RECOMMENDED FOR SUBSTRATE BY AIR-BARRIER MATERIAL MANUFACTURER. 1. BASIC OF DESIGN PRODUCT: MEL-PRIME™ IN WATER-BASE PRIMER BY W. R. MEADOWS, INC. FLASHING AND TRANSITION MEMBRANE: SELF-ADHESIVE POLYIMINE MEMBRANE HAVING A THICKNESS OF 40 MILS. RECOMMENDED FOR SUBSTRATE BY AIR-BARRIER MATERIAL MANUFACTURER.

2. REINFORCING FABRIC: PRODUCT; AIR-BARRIER THROUGH WALL FLASHING BY W. R. MEADOWS, INC. C. JOINT FILLS: FULL CONTACT APPLIED, SINGLE COMPONENT, FLASHING MEMBRANE FOR ROUGH OPENINGS, INCLUDING RECOMMENDED FOR SUBSTRATE BY AIR-BARRIER MATERIAL MANUFACTURER. BASIS OF DESIGN PRODUCT: AIR-SHIELD LIQUID FLASHING BY W. R. MEADOWS, INC. COULMING MASTIC: MASTIC FOR SEALING PENETRATIONS AND TERMINATIONS OF MEMBRANE. 1. BASIS OF DESIGN PRODUCT: PORTING MASTIC BY W. R. MEADOWS, INC. D. DETAILING MEMBRANE: NON-SLUMP WATERPROOFING MASTIC FOR JOINT DETAILING. 1. BASIS OF DESIGN PRODUCT: BEND BY W. R. MEADOWS, INC.

SECTION 08 11 13 - HOLLOW METAL DOORS AND FRAMES

1.2 DEFINITIONS A. MINOR: MINIMUM THICKNESS OF BASE METAL WITHOUT COATINGS ACCORDING TO ASTM A 2136, 2137 OR SD 1.203. B. HOLLOW-METAL DOORS AND FRAMES: 1.1 NON-FIRE-RATED STEEL DOORS. a. BETWEEN DOOR AND FRAME JAMBS AND HEAD: 1/8 INCH PLUS OR MINUS 1/32 INCH. b. AT BOTTOM OF DOOR: 1/8 INCH PLUS OR MINUS 1/32 INCH. c. BETWEEN DOOR FACE AND STOP: 1/16 INCH TO 1/8 INCH PLUS OR MINUS 1/32 INCH.

1.3 ACTION SUBMITTALS A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT. B. SHOP DRAWINGS: INCLUDE ELEVATIONS, DOOR EDGE DETAILS, FRAME PROFILES, METAL THICKNESSES, PREPARATIONS FOR HARDWARE, AND OTHER DETAILS. C. SCHEDULE: PREPARED BY OR UNDER THE SUPERVISION OF SUPPLIER, USING SAME REFERENCE MEMBERS FOR DETAILS AND OPENINGS AS THOSE ON DRAWINGS.

1.4 MANUFACTURERS A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING: 1. CULDEX DOOR PRODUCTS, AN ASSA ABLOY GROUP COMPANY. 2. CLURUS COMPANY, AN ASSA ABLOY GROUP COMPANY. 3. DEANSTEEL. 4. PEXER INDUSTRIES, INC. 5. HETPAC DOORS AND FRAMES. 6. STEELCRAFT, AN INGENIERIA AND COMPANY.

1.5 REGULATORY REQUIREMENTS A. FIRE-RATED ASSEMBLIES: COMPLY WITH NFPA 80 AND LISTED AND LABELED BY A QUALIFIED TESTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION FOR FIRE-PROTECTION RATINGS INDICATED, BASED ON TESTING AT POSITIVE PRESSURE ACCORDING TO NFPA 252 OR UL 10C.

1.6 EXTERIOR DOORS AND FRAMES A. RELEVANT DOORS AND FRAMES: SD 1.203, LEVEL 2. B. PHYSICAL PERFORMANCE: LEVEL B ACCORDING TO SD 1.203.4. C. DOORS: 1. TYPE: AS INDICATED IN THE DOOR AND FRAME SCHEDULE. 2. THE THICKNESS: 1 3/4 INCHES. 3. FACE: UNCOATED, COLD-ROLLED STEEL SHEET, MINIMUM THICKNESS OF 0.042 INCH. 4. EDGE CONSTRUCTION: MODEL 1, BUTL FLUSH. 5. CORE: MANUFACTURER'S STANDARD.

1.7 INTERIOR DOORS AND FRAMES A. RELEVANT DOORS AND FRAMES: SD 1.203, LEVEL 2. B. PHYSICAL PERFORMANCE: LEVEL B ACCORDING TO SD 1.203.4. C. DOORS: 1. TYPE: AS INDICATED IN THE DOOR AND FRAME SCHEDULE. 2. THE THICKNESS: 1 3/4 INCHES. 3. FACE: UNCOATED, COLD-ROLLED STEEL SHEET, MINIMUM THICKNESS OF 0.042 INCH. 4. EDGE CONSTRUCTION: MODEL 1, BUTL FLUSH. 5. CORE: MANUFACTURER'S STANDARD.

1.8 HARDWARE A. FINAL ADJUSTMENTS: CHECK AND REPAIR/OPERATING HARDWARE ITEMS IMMEREDIATELY BEFORE FINAL INSPECTION. LEAVE WORK IN COMPLETE