SECTION 06220- MILLWORK

MINIMUM COMPLIANCE STANDARDS: "Quality Standards of the Architectural Wood Industry (AWI).

B. PLASTIC LAMINATE: Submit full range of colors, patterns, textures, and finishes of plastic laminate available for selection. Use horizontal grade typically. Vertical grade may be used for cabinet interiors and vertical surfaces of cabinets. Use balance sheet as required by AWI. Cores shall be 3/4 inch PS-1-83 BD Exposure 1 plywood and edges shall be self-edge unless specified 1. "Nevamar", Exxon Chemical Co.

MOISTURE CONTENT: 8%-13% at time of installation. 2. NATURAL FINISH HARDWOOD: Comply with AWI 3. PAINT GRADE HARDWOOD: Any species without coarse

D. SOFTWOOD PLYWOOD: PS-1-83 EXPOSED: Medium Density Overlay (MDO). SEMI-EXPOSED: Grade B CONCEALED: Grade D.

E. MATERIAL THICKNESS: The following thickness shall apply except when shown thicker on the Drawings: 1. BOTTOMS, ENDS, DIVISIONS: 3/4 inch thick. 2. FACE PLATES: Equal to door thickness with 3/4 inch

3. WEB FRAMES: 3/4 inch minimum. 4. BACKS AND DRAWER BOTTOMS: 1/4 inch plywood, over braces to 12 square feet. DRAWER FRONTS: 3/4 inch.

6. DRAWER BACKS AND SIDES: 1/2 inch. SHELVES: Unsupported, exposed shelves 3/4 inch thick to 36 inches and 1 inch minimum to 42 inches. 8. BASES: Design to space 3 inches deep \times 4 inches high \times 1/2 inch deep recessed base across exposed ends. 9. DOORS: 3/4 inch minimum thickness, except when shown

F. CABINET HARDWARE: Prepare the millwork for the

G. INSTALLATION: Place level, plumb, and at right angles to adjacent work. Where field cutting or trimming is necessary, perform in a neat, accurate, professional manner without damaging the products and adjacent work. Attach securely so the products will perform to their maximum ability without damage resulting from inadequate fastenings.

H. TYPICAL CABINETS: AWI "Custom: grade with plastic laminate tops and exposed surfaces. Semi—exposed surfaces shall be plastic laminate except drawer shells shall be wood.

SECTION 07160 - DAMPPROOFING

A. WARRANTY: Warrant the Work specified herein for one year against becoming unserviceable or causing an objectionable appearance resulting from either defective or nonconforming materials and workmanship. Defects shall include, but not be limited to, the following: Leaking water or bitumen

Releasing from the substrate. B. PRODUCT DATE: Submit schedules, charts, literature, and illustrations to indicate the performance, fabrication procedures

DAMPPROOFING MEMBRANE: "Tyvek" polyester film; or FELT: TD 226 Type 1, No. 15 asphalt coated felts. Attach DAMPPROOFING to surface in single fashion, starting at 4. Imbed DAMPPROOFING into adhesive as necessary to securely

hold in place. Staple sheet into plywood at the top of each sheet 8 inches on center and lap the next sheet over the staples and imbed

SECTION 07175- WATER REPELLENT

A. PRODUCT DESCRIPTION: GENERAL: Water clear , fast drying, penetrating, water VEHICLE: Water— alcohol formulation.

SOLIDS: Siloxane formulation. B. PROPERTIES: REPELLENCE: No water penetration on surface as evidenced v absence of wet discoloration ADHESION: No interference with the adhesion of sealant. If tests show interference, mask off sealant areas, or apply repellent after sealant are installed.

SHEEN: Zero sheen. DISCOLORATION: No change in color or tone.
RESISTANCE TO HOUSEHOLD CHEMICALS: ASTM D 1308; no change in color, finish or adhesion.

C. APPROVED MANUFACTURERS: Specifications are based on first names Manufacturer. Other approved manufacturers must meet or exceed this standard. I. "CP-500", Chemical Products, Oklahoma City, OK. (800) 624-2. "Chem-Trete-BSM", Trocal, Rockliegh, NJ 07647 (800) 631-

3. "Dural Treat", Dural International Corp., Deer Park, NY. 11729 (516) 586-1655. 4. "Duxbac", Clover Chemical Corp. Houston, TX 77181 (713) 880-5447 5. "Siloxane" Weather Seal, ProSoCo, Inc. Kansas City, KS

66177 (913) 281–2700. 6. "Chemstop SMS-250", Tamms Industries Co., Itasca, IL 60134 (312) 773–1870

D. Follow manufacturer's recommended application procedures. SECTION 07211 - BATT AND BLANKET INSULATION

A. MINIMUM COMPLIANCE STANDARDS: The following Documents govern the Work except where more restrictive items are specified:

Federal Specifications HH-I-521F, Type III. 2. American Society of Heating, Refrigeration, and Air Conditioning Engineers. National Environmental Systems Contractors Association.

B. INSULATION: Mineral wool or glass fiber batts or blanket conforming to E.P.A. energy conservation requirements and F.S. HH-I-521F, Type III. 1. UL RATING: Maximum flame spread of 25, fuel contributed of 50, and smoke developed of 50 when tested per ASTM E 84.

2. THERMAL RESISTANCE: "R" values are listed in the ASRAE Guide for batt and blanket insulation. Provide 6 inch R-23 for roof and 6 inch R-19 for walls. Provide aluminum foil laminated to one side with flanges for stapling application.

C. INSTALLATION: Positively attach edges an ends to prevent gaps or openings in the vapor barrier. Install blankets with the vapor barrier to the warm side. Butt sides and edges of blankets together to avoid gaps in insulation. Do not cover insulation until the installation has been inspected and approved.

SECTION 07545 THERMOPLASTIC POLYOLEFIN (TPO) MEMBRANE ROOFING

PART 1 GENERAL 1.1 SECTION INCLUDES Thermoplastic Polyolefin Membrane Roofing.

1.2 RELATED SECTIONS

 A. Section 05310 - Steel Roof Deck.
 B. Section 06100 - Rough Carpentry: Roof blocking installation and requirements.
C. Section 07620 — Sheet Metal Flashing and Trim: Metal flashing and

counter flashing installation and requirements.

D. Section 07700 - Roof Specialties and Accessories: Roof hatches, expansion joints, pavers and other related roof accessories.

E. Section 15430 — Plumbing Specialties: roof drains, scuppers, gutters and downspout installation and requirements. One—Step: A two—component, polyurethane construction grade, low—rise expanding adhesive designed for bonding insulation to various substrates using a portable applicator.

B. ANSI/SPRI WD-1 "Wind Design Standard for Roofing Assemblies".
C. ASTM International (ASTM):
1. ASTM C 208 - Standard Specification for Cellulosic Fiber 2. ASTM C 578 — Standard Specification for Rigid, Cellular

 ASIM C 5/8 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.
 ASTM C 1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board.
 ASTM D 41 - Standard Specification for Asphalt Primer Used in Roofing, Dampproofing, and Waterproofing.
 ASTM D 226 - Standard Specification for Asphalt-Saturated Organic Eath Used in Roofing and Waterproofing. ASTM D 225 - Standard Specification for Asphalt Saturate
Felt Used in Roofing and Waterproofing.
ASTM D 312 - Standard Specification for Asphalt Used in

Roofing.

7. ASTM D 412 — Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension.

8. ASTM D 1079 — Standard Terminology Relating to Roofing, Waterproofing, and Bituminous Materials.

9. ASTM D 2178 — Standard Specification for Asphalt Glass Felt Used

ASTM D 2178 - Standard Specification for Asphalt Glass Felt Used in Roofing and Waterproofing.
 ASTM D 4263 - Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method.
 ASTM D 4491 - Standard Test Methods for Water Permeability of Geotextiles by Permittivity.
 ASTM D 4869 - Standard Specification for Asphalt-Saturated Organic Felt Underlayment Used in Steep Slope Roofing.
 ASTM D 6878 - Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing.

Materials.

D. International Code Council (ICC):

1. International Building Code (IBC).

E. National Roofing Contractors Association (NRCA) — Low Slope Roofing and Waterproofing Manual, Current Edition.

F. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA) — Architectural Sheet Metal Manual.

G. Underwriters Laboratories (III):

Association, "Inc. (Simplify) — Reconstruction of State and Materials Guide".

1. TGFU R1306 — "Roofing Systems and Materials Guide".

2. UL-790 — Standard Test Method for Fire Tests of Roof Coverings.

H. ANSI/ASHRAE/IESNA Standard 9.1 (2007): Energy Standard for Buildings Except Low-Rise Residential Buildings.

 Roof system is designed to withstand wind uplift forces as calculated using the current revision of ASCE-7.
 Roof system is designed to achieve a FM 1-115 wind uplift B. Thermal Performance: Roof system will achieve a minimum R value not less than 25.56.

C. Drainage: Provide a roof system with positive drainage where all standing water dissipates within 48 hours after precipitation Building Codes:

1. Roof system will meet the requirements of all federal, state and local code bodies having jurisdiction.

Submit under provisions of Section 01300.

Product Data: Manufacturer's data sheets on each product to be used, including:

1. Preparation instructions and recommendations.

Storage and handling requirements and recommendations installation methods. Submit approved plan, section, elevation or isometric drawings which detail the appropriate methods for all flashing conditions found on the project.

Drawings.

D. Selection Samples: For each finish product specified, two complete sets of chips representing manufacturer's full range of available colors, membranes, and thicknesses.

For each finish product specified, two Verification Samples: For each finish product specified, two samples, minimum size 4 inches (100 mm) square representing actual product, color, and patterns.

1. All products listed in this section are to be installed by a single installer with a minimum of five (5) years demonstrated experience in installing products of the same type and scope as specified.

2. Installer must be capable of extending the Manufacturer's Labor and Materials guarantee.

Installer must be capable of extending the Manufacturer's No Dollar Limit guarantee.

.7 DELIVERY, STORAGE, AND HANDLING A. Store products in manufacturer's unopened packaging until ready for installation.
 B. Store and dispose of hazardous materials, and materials contaminated by hazardous materials, in accordance with requirements of local authorities having jurisdiction.
 C. Material Safety Data Sheets (MSDS) must be on location at all times during the transportation at application of

times during the transportation, storage and application of When loading materials onto the roof, the Carlisle Authorized Roofing Applicator must comply with the requirements of the

building owner to prevent overloading and possible disturbance t

1.8 PROJECT CONDITIONS

A. Proceed with roofing work only when weather conditions are in compliance with the manufacturer's recommended limitations, and when conditions will permit the work to proceed in accordance

when conditions will permit the work to proceed in accordance with the manufacturer's requirements and recommendations.

Proceed with work so new roofing materials are not subject to construction traffic. When necessary, new roof sections shall be protected and inspected upon completion for possible damage.

Provide protection, such as 3/4 inch thick plywood, for all roof areas exposed to traffic during construction. Plywood must be smooth and free of fasteners and splinters.

The surface on which the insulation or roofing membrane is to be applied shall be clean, smooth, dry, and free of projections or contaminants that would prevent proper application of or be incompatible with the new installation, such as fins, sharp edges, foreign materials, oil and grease.

New roofing shall be complete and weather tight at the end of the work day.

work day.

Contaminants such as grease, fats and oils shall not be allowed to come in direct contact with the roofing membrane.

 A. At project closeout, provide to Owner or Owners Representative an executed copy of the manufacturer's Total System warranty, outlining its terms, conditions, and exclusions from coverage.

— Adhered 80—mil TPO - Mechanically Fastened 80-mil TPO a. Duration: 30 Years.

PART 2 PRODUCTS 2.1 MANUFACTURERS

Acceptable Manufacturers:
 Carlisle SynTec
 GAF Commerical Roofing Products
 Flex Roofing systems
 Firestone Roofing Systems
 Johns Manville Roofing System
 Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 SCOPE / APPLICATION A. Roof System: Provide a waterproof roof system, capable of

withstanding uplift forces as specified in the Design Criteria article of this section.

1. Membrane Attachment: Mechanically Attached.

B. Base Flashing: Provide a waterproof, fully adhered base flashing system at all penetrations, plane transitions and terminations.

C. Insulation: Provide a roof insulation system beneath the finish

2.4 INSULATION A. Polyisocyanurate HP—H: Rigid board with fiber reinforced facers on both sides, meeting or exceeding the requirements of ASTM C 1289. Carlisle HPH.

1. Compressive FIPH.

1. Compressive Strength: 20 psi (138 kPa).

2. Density: 2 lb per cubic foot (24 kg/cu m) minimum.

SecurShield Polyiso: Rigid board with coated glass fiber mat facers on both sides, meeting or exceeding the requirements of ASTM C 1289. Compressive Strength: 20 psi (138 kPa).
 Density: 2 lb per cubic foot (24 kg/cu m) minimum.

A. Sure-Seal FAST 100 or 100 LV Adhesive: A spray or extruded applied, two-component polyurethane, low-rise expanding foam adhesive used for attaching approved insulations to compatible substrates (concrete, cellular lightweight insulating concrete, gypsum, cementitious wood fiber, wood or steel) or existing smooth or gravel surfaced BUR,

modified bitumen or cap sheets.

Sure—Seal FAST Catalyst: Added to FAST Adhesive (Part B Side) to quicken adhesive reaction time.

Sure—Seal FAST Dual Cartridge Adhesive: A two—component, polyurethane construction grade low—rice expanding adhesive. polyurethane construction grade, low-rise expanding adhesive designed for bonding insulation to various substrates using a

portable applicator.

FAST Box Set: A two-component, polyurethane construction grade, low-rise expanding adhesive designed for bonding insulation to various substrates using a portable applicator.

FAST Bag in a Box: a two-component, polyurethane construction grade, low-rise expanding adhesive designed for bonding insulation to various substrates, packaged for use with the

PaceCart 2.

OlyBond 500 BA — A two-component, polyurethane, low-rise expanding adhesive used to bond insulation to various substrates using a mechanical dispenser system.

OlyBond Spot Shot — A two-component, polyurethane construction grade, low-rise expanding adhesive designed for bonding insulation to various substrates using a portable applicator

SECTION 07545 THERMOPLASTIC POLYOLEFIN (TPO) MEMBRANE ROOFING (CONT) 2.6 THERMOPLASTIC POLYOLEFIN (TPO) MEMBRANE

A. Sure-Weld EXTRA Membrane:
1. Color: White.
2. Membrane Thickness: 80 mil nominal.
a. Thickness over Scrim: 0.034 inches (0.86mm) +/-10

percent.
b. Breaking Strength (ASTM D 751): 350 lbf/in (1.6 kN/m) minimum.
c. Tear Resistance (ASTM D 751): 55 lbf/in (245 N/m)

minimum.
d. Elongation (ASTM D 751): 25 percent.
3. Field Sheet Dimensions:
a. Width: 6 feet (1.8 m) maximum.
b. Width: 8 feet (2.4 m) maximum.

A. Inside Corners: Pre-molded corner flashing for inside corners.
 80 mil thickness. Color to match membrane. Special colors require custom fabrication process.
 B. Outside Corners: Injection molded corner used for flashing outside corners.
 80 mil thickness. Color to match membrane.

outside corners. 80 mil thickness. Color to match membrane. Special colors require custom fabrication process. TPO T—Joint Covers: Injection molded 80 mil thick TPO formed into a 4.5 inch (114mm) diameter circle used to seal step—offs at splice intersections. Color to match membrane. Special colors

require custom fabrication process.

D. TPO Curb Wrap Corners: Pre—fabricated corner flashings made from 45 mil thick reinforced Sure—Weld membrane. 6 inch (152mm) wide base flange and a 12 inch (305mm) overall height. Sizes available to fit curbs up to 6 foot by 6 foot (1828 x 1828 mm) in size. Color to match membrane. Gray, tan and special colors require custom fabrication process.

E. Molded Pipe Seals: A pre-molded flashing and clamping ring used for pipe penetrations. Available for 0.75 inch to 8 inch (19 -203.2mm) diameter pipes. Color to match membrane. Special

-203.2mm) diameter pipes. Color to match membrane. Special colors not available. Split Pipe Seals: Pre-fabricated flashing consisting of 45 mil thick reinforced Sure-Weld Membrane for pipes 1 inch to 6 inch (25.4 -152.4mm) in diameter. A split (cut) and overlapped to is incorporated to allow the pipe seal to be opened and wrapped around the pipe when it is not possible to pull a standard pipe flashing over a round penetration. Gray, tan and special colors require custom order fabrication. Custom sizes available on a special order basis.

require custom order fabrication. Custom sizes available on a special order basis.

TPO Square Tubing Wraps: Pre-fabricated flashings made of 45 mil thick reinforced Sure-Weld membrane for square tubing. A split (cut) and overlap tab are incorporated into these parts to allow the seals to be opened and wrapped around a square tubing penetration with an obstruction. Stock sizes include 3- inch, 4-inch, 5-inch and 6 inch (76, 102, 127, 152 mm) diameter square tubing. tubing. Gray, tan and special colors require custom order fabrication. Custom sizes available on a special order basis. TPO Molded Sealant Pockets: . A two-piece, interlocking injection molded, flexible pocket with a rigid polypropylene vertical wall and pre-formed deck flanges. Color to match membrane. Special colors

SECTION 07538- MODIFIED BITUMINOUS ROOFING

WARRANTY: Warrant the Work specified herein for on e year against becoming unserviceable or causing an objectionable appearance resulting from either defective or nonconforming materials and workmanship. Defects shall include, but not be limited to, the following: 1. Peeling, cracking, blistering, alligatoring, or releasing from the

2. Softening or becoming tacky.3. Leakage of water into the building or within the construction commencing work meet with following parties to discuss the roof materials, conditions and installation procedures,.

Construction Superintender Roof Material Manufacturer's Representatives.

> MATERIALS: Owens/Corning 2D1-NG and 2D1-XG. Modified bitumen hot asphalt applied roof membrane. PRIMER: As recommended by the roofing manufacturer. BASE SHEET: Perma Ply IV base sheet.

ASPHALT: ASTM D312, Type III. 4. GRAVEL: 5/8" roofing gravel applied in 60 lbs./sq.ft. asphalt at a rate of 400 lbs./100sq.ft. CANT STRIP: 18" x height required; tapered fiberglass.

FASTENERS: As recommended by the roof manufacturer for 7. MANUFACTURER: Owens-Corning Corp. Toledo, Oh. 43650 8. ROOF INSULATION: 2" rigid Hy—Threm mechanically fastened to steel deck per manufacturer's printed instructions.

PREPARATION: Do not install roof until substrate is smooth, Install roof according to manufacturer's printed instructions. 3. CLEAN UP: Remove all roofing debris when Work is

SECTION 07620 - BUILDING SHEET METAL

MINIMUM COMPLIANCE STANDARDS: The following Documents govern the Work except where more restrictive requirements are specified. Sheet Metal Manual of the Sheet Metal and Air Conditioning

Contractor's National Association (SMACNA). B. WARRANTY: Warrant the work specified herein for one year against becoming unserviceable or causing an objectionable appearance resulting from either defective or nonconforming materials and workmanship. Defects shall include, but not be limited to the following:

Leaking. Wrinkling Breaks or tears caused by restraint of expansion and contraction.

C. SHOP DRAWINGS: Indicate size, material, and finish. Show locations and installation procedures. Include details of joins, attachments, and clearances.

GALVANIZED SHEET STEEL MATERIAL: QUALITY STANDARD: ASTM A 257, coating designation G 90. 2. FINISH: a. METAL PREPARATION: Prepare surface for painting in

compliance with ASTM D 2090 recommendations. Prefinish sheet metal with polyester enamel finish 1 mil minimum thickness. GALVANIZED SHEET GAUGES: 24 gauge minimum.

Clips used for attachment shall be two gauges thicker than the piece they retain. 2. FASTÉNERS: Galvanized, cadmium, and stainless steel. MATERIAL COMPATIBILITY: Provide mutually compatible

materials and fastening where in contact. If not available, isolate incompatible materials to prevent electrolysis. Prime flanges and other metal in contact with roofing

2. Bed sheet metal flanges on roof membrane with flashing

SECTION 07721 - ROOF CURBS

(713) 726-1800.

SECTION 07655- BASE FLASHING A. MATERIALS: Provide a synthetic ELASTOMERIC compound waterproofing material with thermoplastic fibers added for extra tensile strength and tear resistance, laminated to a 7 mil vinyl film. Provide Phox Gyp+Flash as manufactured by Phox Enterprises, Inc. 11210 S. Post Oak Rd., Houston, Texas 77035

B. PREPARATION: Clean surfaced free of dust, loose rust, plaster, mortar, paint droppings, and other materials that may prevent permanent adherence to the substrate. Apply primer with brush or lambs wool roller at the rate of 250 to 250 square feet per gallon. Allow primer to dry a minimum of 1 hour. Remove primer from finish surfaces with Toluene or similar solvent. Use primers recommended by the manufacturer.

INSTALLATION: Install tape at locations requiring base flashing to channel water out of weep holes. Extend membrane to within 1 inch of face of masonry, and a minimum of 8 inches up the vertical substrate. Lap vertical joints of flashing tape a minimum of 2 inches. lap horizontal joints of flashing tape a minimum of 2 inches in direction of water flow.

MANUFACTURERS:

1. The Pate Company, Broadview, IL 60153 (312) 681- 1920, model SCEB solid top and other types as shown on the Drawings. 2. ThyBar Corp. Addison, IL 60101 (312) 543-5300

3. Custom Curb, Inc. Chattanooga, TN 37407 (615)629-6241. B. Refer to Drawings for necessary sizes.

WALLS: GALVANIZED STEEL. 2. WOOD NAILERS: Factory installed.

D. Install curb assemblies in accordance with manufacturer's

SECTION 07920 - SEALANTS AND CAULKING WARRANTY: Warrant the Work specified herein for 2 years against becoming unserviceable or causing an objectionable appearance resulting from either defective or nonconforming

materials and workmanship. 1. Defects shall include, but not be limited to: a. Staining from abutting materials or filler. b. Migrating, bleeding into, or staining abutting materials.c. Unsightly surface deformation by causes other than movement. d. Excessive color change, chalking, or dust pic-up.

Hardening to more than 25% over stated hardness. 2. Warrant that sealants exposed to windloads will resist the design windload of the local building code with maximum strength factor on the sealant of 20 psi with a safety factor of 6 to

B. PRODUCT DATA: Submit schedules, charts, literature and illustrations to indicate the performance, fabrication procedures,

C. EXTERIOR SEALANTS AND SEALANTS FOR MOVING JOINTS: Curing type, two part bulk compounds conforming to F.S. TT-S-00227E (3) , or one part conforming to F.S. TT-S-001543A. Provide compounds that cure or polymerize by solvent 1. APPROVED BASIC INGREDIENTS: Polysulfide, silicone,

2. NON-ACCEPTABLE: Linseed oil or other oil base caulks, asphaltic, or coal tar types. Acrylic, hypalon, and butyl base 3. SOLIDS: 96% minimum by volume.

4. CURED HARDNESS: (Shore A durometer) Maximum of 30. D. INTERIOR SEALANTS: All exterior sealants plus the following types. 1. Skinning type, bulk compounds conforming to F.S. TT-S-001657 or ASTM C834, with active ingredients of butyl rubber,

acrylic, hypalon, and other similar paintable compounds. E. CONCEALED SEALANTS: Non-skinning, resilient (soft) performed, or bulk compounds, conforming to NAAMM SS-la SS-Ib, or SS-1c with basic ingredients of polybutene synthetic resins, oleoresinous compounds, or similar noncuring compounds. 1. SEALANT TAPE: Performed or extruded non-curing butyl 2. NON-ACCEPTABLE: Types which do not reseal if seal is

SEALANT COLORS: White, black, gray aluminum

limestone and brown. Provide clear silicone for glass joints. Dow Corning Corp. Midland, Ml. 48640 (800)248-2345. 2. General Electric Co. Waterford, NY 12188 (518) 237-3330. 3. Pecora Corp. Harlesville, PA 19438 (215) 723-6051.

4. Tremco, Cleveland, OH 44104 (216) 229-3000. H. ACCESSORY MATERIALS:

1. BACK UP FILLERS: not absorbent nonstaining expanded closed cell rubber compatible with sealants used

2. COMPRESSOR FILLER: a. Will Seal, ILLbruch USA Troy MI 48084 b. Emseal, USA, Stamford Conn.

3. PRIMERS CLEANERS AND TOPCOATS: Use only materials listed as suitable in sealant manufacturers instructions. Test for SECTION 09510 - ACOUSTICAL CEILINGS

A. EXPOSED GRID SYSTEM: Provide direct hung suspension system complying with ASTM C 635, intermediate duty main runners and minimum 10 lb./lineal foot cross tees, with smooth matte white painted finish. 1. WALL MOLDINGS: 15/16 inch angle moldings manufactured by the suspension system manufacturer. HANGWIRE: 12 gauge annealed

5. COATING: Galvanized. 4. EXPOSED FINISH: factory flat white enamel. 5. APPROVED MANUFACTURER: Use only one manufacturer's products. a. Donn Corp., Westlake, OH 44145 (216)871-1000. B. EDGE TRIM SYSTEM: Provide edge trim system for suspended ceiling system consisting of 4" x 9/16" metal pans curve to inside and outside radi

from 18" to 288" and sweeping through included angle from 15 degrees to 1. Manufacturer: USG Interiors, Inc., Chicago, Illinois. 2. Trim: 4" COMPASSO trim. 4" wide face, 9/16" horizontal legs with hems formed for attachment to the COMPASSO mounting clip; commercial quality cold rolled 24 gauge steel, factory finished in baked

3. Spice plate: steel in finish to match trim pans; formed for snap-fit into 4. Attachment clips: hot dipped galvanized steel in finish to match pans formed for snap-fit into 4" pan and attached to ceiling suspension system 5. for specific project details and bill of materials, see USG Interiors, drawings provided by USG Interiors sales representative. USG Interiors shall submit complete installation drawings including all trim pieces,

attachment clips, splice plates and corner pieces, installation of related lighting and air distribution components, access requirements, and sound absorption requirements. C. ACOUSTIC CEILING BOARD: Mineral board, non-directional fissured,

medium textured. 1. TYPES: Refer to the Finish Schedule. 2. SIZE: 24 inch x 24 inch x 5/8 or 3/4 inch. 3. NOISE REDUCTION COEFFICIENT: 0.50 - 0.60 type 7 mounting. 4. SOUND TRANSMISSION CLASS: Minimum 35 to 39 db. 5. FLAME RESISTANCE: Class A, incombustible per F.S. SS-S-118A.

6. FLAME SPREAD: Class 1 (0-25) per ASTM E 84. D. APPROVED MANUFACTURES: Use only one manufacture's products. 1. Armstrong World Industries, Inc., Atlanta, GA 30339 (404)955-1688. 2. The Celotex Corp., Tampa, FL 33607 (813)871-4554. 3. United States Gypsum Co., Chicago, IL 60606-4385 (312)321-4000.

E. Install suspension System in accordance with manufacture's relevant specifications and ASTM C 636.

1. Space hangers minimum 6 inches from end and 4 feet between ends. 2. Provide additional hangers for items to be supported by ceiling suspensio system to prevent eccentric deflection or rotation of support. 3. Support main runners directly from hangers; do not bear on walls or

4. Space main runners to support acoustic panels and other Work resting i or on the ceiling. 5. Interlock cross—runners with main runners. 6. Adjust suspension system every 20 feet to plus or minus 1/4 inch from

module in both directions. G. ACOUSTIC CEILING BOARD:

SECTION 09665 - SYNTHETIC RUBBER SHEET FLOORING

A. WARRANTY: Warrantee the Work specified herein for one year against becoming unserviceable or causing an objectionable appearance resulting from either defective or nonconforming materials and workmanship. Defects shall include, but not be limited to the following: 1. Releasing from substrate. 2. Opening up at joints. 3. Failure to comply with NFPA Bulletin No. 56.

B. APPROVED MANUFACTURES: Specifications are based on first named manufacturer. Other approved manufacturers must meet or exceed these 1. Flexco Division of Textile Co., Inc., Tuscumbia, AL 35674 (205)3832. Nora Flooring Division of Robus Products Corp., Madison, IN 47250 (812)273-1852.

3. Jason/Pirelli Industrial Inc., Fairfield, NJ 07006 (201)227-4904. C. MATERIAL: . THICKNESS: 1/8 inch

. STUDS: 1 1/4 inch in diameter raised .025 SI7F: 18*18 FRAME SPREAD: class A ASTM E 84

COLOR AND MODEL: light gray and RGT - 754

unserviceable or causing an objectionable appearance resulting from either defective or nonconforming materials and workmanship. Defects shall include but not be limited to the following:

warping, buckling shrinking or cracking softening or discoloring

coming loose MATERIALS:

2. SIZE: 1/8 inch thick height shown on drawing 3. COLOR: as selected by architect from full manufacturers range

butt end to hairline fit, avoid stretching

place base with joints under compression and so toe continually touches.

A. Warrant the work herein specified for one year against becoming unserviceable or causing an objectionable appearance resulting from either defective or limited to the following:

B. SUBMITTALS: Submit full range of colors patterns textures and finishes

COLOR CHIPS: Provide a complete set of color chips for the color 2. SMALL APPLIED COLORS: Provide pieces of actual material on which paint will occur.

3. SHEEN SAMPLES: provide full range of varying sheen when sheens are controllable by mixing.
4. MATERIAL LIST: Give the manufacturers name, product no., and generic description of each proposed product.

C. COLORS: Refer to finish schedule.

alkali is present neutralize to suitable level.

D. PREPARATORY WORK: Protection Work: Arrange procedures and devices to protect other work from disfigurement and physical damage. Repair and replace materials damaged as a result of the work of the section. 2. Steel and Iron: Remove grease oil and dust and touch up chipped and absorbed places on items that have been primed using same type of primer. 3. Concrete Masonry: Check for high moisture and alkali content. If high

under other sections of work. Excessive patching or treatment is not MANUFACTURER'S INSTRUCTIONS: Follow the manufacturer's preprinted instructions as a minimum requirement for the use and installation

4. Substrates General: Provide normal minor patching on surfaces provided

APPEARANCE: Provide uniform color texture and sheen. 2. NEATNESS: Do not smear splatter or run coating over adjoining

F. PAINT THICKNESS: Provide the minimum dry film thickness per coat:

Enamels on Metals: 1 mil

c. Acrylic Urethane: per manufacturers recommendation. d. Latex Paint: 1 mil e. Metal Primers: 1.5 mil Under Coats: 1.5 mil

Oil Paint: 1.5 mil n. Traffic Lines: 2.5 mil G. COMPATIBILITY OF PAINT TYPES: Verify the compatibility of each type of finish coat with shop primers and between field coats. When necessary switch

paint types or use a block coat to avoid interference between paints. H. TYPICAL EXTERIOR SYSTEM:

Galvanized Metals: one coat zinc dust and primer or epoxy ester . two coats semi gloss enamel . Steel or Iron:

1 coat touch up primer l coat iron oxide primer 2 coats semi gloss enamel Thickness Test: Use visual observation gauge.

TYPICAL EXTERIOR SYSTEMS: Painted wood: 1 coat oil base enamel 2 coat satin enamel

. gypsum dry wall: I coat sealer and primer 2 coats flat latex or oil base enamel Steel: 1 coat touch up primer

2 coats semi gloss enamel SECTION 10536 - ILLUMINATED FASCIA SIGNAGE SYSTEMS A. PRODUCT DATA: submit schedules, charts, data, and illustrations to indicate

the performance fabrication and procedure produce variations and accessories.

B. APPROVED MANUFACTURES:

SECTION 10810 - TOILET ROOM ACCESSORIES: A. A. PRODUCT DATA: submit schedules, charts, data, and illustrations to indicate the performance fabrication and procedure produce variations and B. MINIMUM COMPLIANCE STANDARDS: the following documents govern the work except where more restrictive items are specified.

D. MOUNTING LOCATIONS: refer to drawings, when not shown submit

E. INSTALLATION: Securely fasten each item to prevent dislocation or

vandalism. Attach each item plumb and level in the locations indicated.

manufacture's recommendations for locations and mounting height before

GENERAL NOTES:

. ALL SURFACES SHALL BE PROPERLY PREPARED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS PRIOR TO THE INSTALLATION OF WALL COVERING. WALL FINISH TO BE SAMPLED FOR APPROVAL. FLAME SPREAD RATINGS FOR INTERIOR FINISHES ARE TO BE IN ACCORDANCE WITH APPLICABLE

ALL WORK NOTED "N.I.C." OR "NOT IN CONTRACT" IS TO BE ACCOMPLISHED BY A CONTRACTOR OTHER THAN THE GENERAL CONTRACTOR AND IS NOT TO BE PART OF THE CONSTRUCTION AGREEMENT. THE GENERAL CONTRACTOR SHALL COORDINATE WITH "OTHER" CONTRACTORS AS REQUIRED.

CONTRACTOR SHALL COOPERATE AND COORDINATE ALL JOB OPERATIONS WITH THE OPERATIONS OF OTHERS DOING ADJACENT WORK, SO AS TO PREVENT DELAYS AND CONFLICTS, OR DAMAGES TO EITHER PARTY'S OPERATIONS OR WHERE CLEARANCE PROBLEMS ARISE IN LOCATION OF LIGHT FIXTURES, RETURN AIR GRILLES, SUPPLY DIFFUSERS AND TROFFERS, ETC., AS SHOWN BY DRAWINGS, CONTRACTOR HAS THE OPTION TO RELOCATE BUILDING SYSTEMS WITHIN EACH ROOM AREA WITHOUT AFFECTING THE REQUIRED LIGHT LEVELS AND CFM AIR DISTRIBUTION TO WORK WITHIN THE SPECIFIED CONSTRUCTION CLEARANCES.

5. PARTITIONS ARE TO BE CONTINUOUS OVER DOORS, WHEN APPLICABLE, SIMILAR TO ADJACENT WALLS WHERE DRYWALL CONTINUES TO STRUCTURE ABOVE.

CONTRACTOR SHALL PROVIDE WOOD TREATED AND FLAME RETARDANT BLOCKING OR REINFORCING IN PARTITIONS THAT ARE COMMON FOR THE NEED OF SUPPORTING FIXTURES, CABINETS, EQUIPMENT, FURNITURE ETC., AS MAY BE REQUIRED OR SHOWN BY DRAWINGS. . CONTRACTOR SHALL PROVIDE WATER RESISTANT GYPSUM BOARD AT ALL PLUMBING CHASES INDICATED AND BEHIND ALL COUNTERS WHICH ACT AS WET PRONE

THE SUSPENSION GRID CEILING SYSTEM SHALL RUN CONTINUOUS AND NO MAIN TEES MAY BE CUT FOR ANY REASON, UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE OWNER.

10. ALL FLOOR MATERIALS AND COLOR CHANGES FROM ROOM TO ROOM SHOULD OCCUR AT THE CENTER LINE OF DOOR PANEL, ENCASEMENT OPENING, OR AS INDICATED BY THE DRAWINGS.

11. CONTRACTOR TO CONFIRM ALL INDIVIDUAL LOCK SETS AND THEIR KEYING REQUIREMENTS, THE QUANTITY AND MASTERING SYSTEM WITH THE OWNER. 12. ALL HEIGHTS ARE MEASURED FROM THE TOP OF SLAB UNLESS INDICATED

13. ALL TELEPHONE EQUIPMENT, WIRING, CONDUITS, ETC., SHALL BE SUPPLIED AND INSTALLED BY THE ELECTRICAL SUBCONTRACTOR AT THEIR EXPENSE. WHERE TELEPHONE COAXIAL OUTLETS ARE INDICATED ON THE DRAWINGS, THE CONTRACTOR SHALL PROVIDE CAT 6. TELEPHONE LINES REQUIRED TO BE LOCATED IN AN EXTERIOR OR INTERIOR WALL SILL BELOW A GLASS PANEL OR AN OPEN ENCASEMENT OF THE WALL SHALL BE ACCESSED WITH THE MEANS OF CONDUIT AND PULL STRING. 14. ALL TELEPHONE LINES SHALL BE TEFLON COATED AND MEET WITH THE LATEST CODE REQUIREMENTS IN JURISDICTION.

15. CONTRACTOR SHALL PROVIDE 3/4" PLYWOOD PANEL PAINTED TO MATCH ADJACENT WALL, FOR TELEPHONE EQUIPMENT. MOUNT PANEL, SIZE AND LOCATION, AS SHOWN IN DRAWINGS. 16. ALL OCCUPANT FURNITURE, EQUIPMENT AND MISCELLANEOUS WILL BE PROVIDED AND INSTALLED BY EQUIPMENT CONTRACTOR. THE EQUIPMENT LISTED IN DRAWINGS SHOULD BE INSTALLED ACCORDING TO THE MANUFACTURERS RECOMMENDATIONS. CONTRACTOR SHALL REVIEW EQUIPMENT AND AND ARCHITECTURAL DRAWINGS IN ORDER TO VERIFY ANY DISCREPANCIES, ERRORS, OR OMISSIONS WITHIN THE CONTRACT DOCUMENTS. INDICATE ANY AND ALL CONTRACT TO THE ADMINISTRACT DOCUMENTS. TO THE MORE

17. MATERIALS WHICH ARE CUSTOM-ORDERED FOR THE PROJECT AND WHICH CANNOT BE RETURNED ARE TO BE SUBMITTED FOR SAMPLE APPROVAL PRIOR TO SHIPMENT OF MATERIAL. ARCHITECT IS TO BE NOTIFIED IMMEDIATELY OF

18. SAMPLES OF CUSTOM PAINT COLORS ARE TO BE SUBMITTED FOR ARCHITECTS APPROVAL PRIOR TO PURCHASE OF MATERIALS.

19. THE GENERAL CONTRACTOR AND THE SUBCONTRACTORS SHALL DOCUMENT AS-BUILT CONDITIONS WHEN DIFFERENT FROM THE CONSTRUCTION DOCUMENTS, AND SHALL PROVIDE SAID DOCUMENTATION TO THE ARCHITECT UPON COMPLETION OF THE WORK.

GENERAL NOTES:

THE CONTRACTOR SHALL PROVIDE FOR THE MILLWORK TO CONFORM TO THE DETAILS SHOWN ON THE DRAWINGS AND SHALL BE FABRICATED IN ACCORDANCE WITH THE ARCHITECTURAL WOODWORKING INSTITUTE AND THEIR REQUIREMENTS FOR CUSTOM GRADE QUALITY CONSTRUCTION, UNLESS NOTED OTHERWISE.

2. PROVIDE ALL FINISHES AS REFERENCED ON THE DRAWINGS AND ELEVATIONS AND AS NOTED IN THE SPECIFICATIONS FOR FINISHES. SUBMIT SAMPLES FOR REVIEW BY THE ARCHITECT FOR APPEARANCE AND FINISH ONLY.

4. ALL MILLWORK FABRICATORS SHALL PROVIDE EDGING ON ALL EXPOSED WOOD PARTICLE BOARD AND/OR PLYWOOD EDGES. ALL EDGING SHALL RUN CONTINUOUSLY AND BE SOLID MATERIAL MATCHING FACE VENEER EXCEPT FOR FIR PLYWOOD, WHICH SHALL BE EDGE BANDED WITH FAS CLEARGUM. MITER EDGING AT CORNERS AND GLUE SURFACES SOLIDLY. 5. INSTALL THE WORK PLUMB, LEVEL, TRUE AND STRAIGHT WITH NO DISTORTIONS. ALL DIMENSIONS, PROFILES, JOINTS AND REVEALS SHALL BE HELD EXACT. INSTALL CABINET DOORS AND DRAWERS SO THEY FIT OPENINGS PROPERLY AND ARE PROPERLY ALIGNED — ADJUST HARDWARE TO CENTER DOORS AND DRAWERS IN OPENINGS AND TO PROVIDE UNENCUMBERED OPERATION. COMPLETE THE INSTALLATION OF HARDWARE AND ACCESSORY ITEMS AS INDICATED.

CONTRACTOR SHALL SUBMIT SHOP DRAWING SHOWING THE LOCATION OF EACH ITEM, DIMENSIONED PLANS AND ELEVATIONS, LARGE SCALE DETAILS, ATTACHMENT DEVICES AND OTHER RELATED COMPONENTS. CONTRACTOR TO SUBMIT ONE (1) SEPIA MYLAR OF EACH ORIGINAL AND THREE (3) BLUE LINE PRINTS OF EACH ORIGINAL FOR ARCHITECTS

This document is an instrument of law of the United States of America, 17 U.S.C. § 102, and shall not be copied or reproduced without the express written consent of



Shaw's Jewelers West Gray

Shaw's Jewelers

PROJECT NO.

DRAWN BY

Houston, Texas

1021 West Gray Ave.

Houston, Texas 77019 DATE 11.11.2011

1014 West Gray Street

CHECKED BY Project **Specifications**

COPYRIGHT© 2011 Hermes Architects, Inc.

_ OF _

1102100

__