

Division 07 - Thermal and Moisture Protection

07112 – BITUMINOUS SHEET MEMBRANE WATERPROOFING -

at wall(s), deck(s), floor(s), floor area(s) and planter(s) to fulfill waterproof building requirements.

07125 – FLUID APPLIED PENETRATING SEALER -

is required by LPS Property Management Services Department for horizontal deck and vertical concrete and masonry wall surfaces, as determined and engineered by A/E or DBT to fulfill building design requirements.

07160 – BITUMINOUS DAMPPROOFING -

for below-grade exterior foundation walls above finish floor levels.

A – ASPHALT OR BITUMINOUS COMPOUND – Sonneborn HYDROCIDE 600, CELOTEX TAR BASE Damp-proof Coating, Karnak BLACK ASPHALTUM COATING or J & P Petroleum Products TEX-MASTIC No. 720 Foundation Coating; from top of footing or bottom of grade beam to indicated adjacent finish grade; apply two separate coatings, primer, and one finish coat to produce a visibly unbroken film.

07165 – BITUMASTIC COATING -

protection on miscellaneous below-grade items and materials.

A – COVERAGE – After bolting or welding and prior to backfilling operations by others, provide a minimum 30-mil (.030") [1mm] trowel grade J & P Petroleum Products TEX-MASTIC No. 712 or Metropolitan Roofing Supplies DUREX DAMPPROOFING MASTIC asphaltic mastic dampproofing bitumen coating on that portion of all exposed-to-earth steel, wood and/or concrete columns, and miscellaneous steel anchorage items: angles, plates and bolts associated with on-site, below-grade masonry or poured-in-place concrete foundations.

07193 – LAMINATED VAPOR RETARDER -

on top of crawl space earth floor and under new interior concrete slabs-on-grade.

A – BARRIER – St. Regis MOISTOP, W. R. Meadows PREMOLDED MEMBRANE, or A/E or DBT accepted equivalent heavy kraft paper laminated together with glass fiber reinforcement over-coated with black polyethylene film on each side; resistant to decay when tested according to ASTM E154; fabricated free of formaldehyde and asbestos.

B – TAPE – Monsanto GER-PAK black 2½" (6.5 cm) wide or accepted equivalent for securing barrier to foundation walls and for sealing barrier lap joints.

07211 – BATT AND BLANKET INSULATION

A – THERMAL INSULATION – United States Gypsum THERMAFIBER Regular, Open-Faced, Foil-Faced in plenums, Flame Resistant, Fast-Fit, M-S, Z-Furring type(s) as relevant to location(s), or comparable spun rock-wool, glass or mineral fiber blankets manufactured by Johns-Manville, Owens-Corning, or Premium Brand; minimum nominal thickness(es) to meet minimum Resistant R Factors (R-30) required by local Code, Colorado Energy Code and to fulfill building design requirements.

B – SOUND INSULATION – United States Gypsum THERMAFIBER Sound Attenuation paperless, foil-less, semi-rigid mats, un-faced paperless rolls or batts; or comparable spun rock-wool, glass, or mineral fiber batts as manufactured by Johns-Manville, Owens-Corning, or Premium Brand meeting FS HH-I-521E Type I, as required to fulfill requirements to meet local code, building design and **LPS** Property Management Services Department requirements.

C – FIRE SAFETY INSULATION – United States Gypsum THERMAFIBER products meetings FS HH-I-558B, Form A, Classes 1 and 2, or comparable system(s) to fulfill design, engineering, and applicable code requirements.

D – TOP OF WALL INSULATION – Sound blankets or comparable paperless, foil-less, semi-rigid glass, rock, or mineral fiber mats; in single or multiple thickness compressed to snugly fill void between juncture between top of walls or partitions and upper floor or roof deck above.

07212 – BOARD INSULATION -

under floor topping on horizontal deck, applied to the underside of deck, walls, or as otherwise required, to fulfill building design requirements.

A – INSULATION ABOVE HORIZONTAL ROOF DECK – Extruded cellular polystyrene type; thermal conductivity of 0.20 Btu/sq. ft./hr./degrees F/inch at 75F; minimum compressive strength of 40 psi; maximum water vapor transmission 0.6 perm per inch; maximum 1 percent water absorption by volume; ship-lapped edges similar to "Styrofoam SM" manufactured by Dow Chemical USA. (See also "Bitumen Roofing Manual: Modified Bitumen Roofing for Littleton Public Schools", published separately.)

B – INSULATION BELOW HORIZONTAL DECK – Celotex THERMAX exposed insulation boards in Interlocking PVC Strips Without Furring or Owens-Corning COMMERCIAL USE BOARD system to produce minimum Resistance value R-5.

C – RIGID WALL INSULATION – Board-stock, square edges, to produce a minimum Thermal "R" Resistance factor of 11.0; ZONALITE Styrene Foam; Dow THURANE; Owens-Corning URETHANE or accepted equivalent.

D – PROTECTION BOARD – Semi-rigid composition board, 1/8" thick, asphaltic laminated, non-asbestos containing pre-molded type.

E – ADHESIVE – Type recommended by insulation manufacturer; capable of securely adhering insulation to applicable surface.

07214 – LOOSE FILL INSULATION –

CertainTeed INSUL-SAFE II or BLOWING WOOL, Manville BLOWING WOOL, or accepted equivalent pneumatic blown loose fill fibered glass nodules manufactured and fabricated free of formaldehyde and asbestos.

07215 – SPRAYED INSULATION –

Formaldehyde and asbestos-free spray-on thermal and sound insulation where determined; national Cellulose CELBAR, American Energy Products SprayDon Type SA, Thermo Products ThermoCon, or accepted equivalent.

Roof Specifications formerly detailed in this section are now available separately. Please return to the Table of Contents for location.

07900 – JOINT SEALERS A – EXTERIOR SEALANTS: 01 – BUILDING(S) – ConTech

SONNEBORN SONOLASTIC NP II, Pecora DYNATROL II, or other

acceptable to **LPS** Property Management Services Department, two- or three-part sealant, non-sag.

02 – PAVEMENTS AND WALKS – Pecora UREXPAN NR-200, or other acceptable to **LPS** Property Management Services Department sealant, self-leveling. **03 –**

WINDOWWALL/CURTAINWALL/STOREFRONT: a – INTERNAL – Dow or General Electric SILICONE SEALANT. **b – PERIMETER** – Dow or General Electric SILICONE SEALANT. **B – INTERIOR CAULKING** – DAP, Gibson-Homans, Pecora, or Tremco latex, acrylic, or oil base

caulk.

01 – FIRE RESISTANT SEAL – Chase Technology Corporation CTC PR-855 CHASE-FOAM fire resistant silicone foam sealant for fire stops and wall/floor penetration seals. **C – JOINT FILLER**

(backer rod) – Round, square, or rectangular as appropriate to joint requirement(s), compressible gray or white polyethylene, or polyurethane foamed plastic such as DENVER FOAM, Dow ETHAFOAM SB, un-tarred oakum or fiberglass; installer option at no extra cost(s) charge(s) to **LPS**.

D – BOND BREAKER – Clear or opaque polyethylene tape or film; self-adhesive type where applicable. **E – JOINT CLEANER/PRIMER/SEALER** – Material as recommended by the caulking or sealant manufacturer.

F – COLOR(S) selected/approved by **LPS** Property Management Services Department from manufacturer standard available colors.