.2 Paint finish: factory applied, chemical resistant thermosetting polyester enamel, sprayed applied by electrostatic process, and baked;
.3 Stainless steel: type 316, no 4 finish (satin);
.4 Sealant: chemical and mildew resistant;
.5 Glass: laminated safety glass, 6,4 mm thick (¼");
.6 Fiberglass reinforced plastic (FRP): 6,4 mm thick (¼");
.7 Fasteners for interior and exterior: type 316 stainless steel, screws must be counter sink type, exposed fasteners are not acceptable; Do not use metals that are corrosive or incompatible with materials joined;
.8 High density polyethylene (HDPE): white, 6,4 mm thick (¼");
.9 Phenolic resin: UL approved, compact solid grade laminate in thicknesses from 6-20 mm with both black and white decorative layer, flame-spread index of 5 or less, and a smoke developed index of 20 or less, according to UL 723 (ASTM E83);
.10 Glass-fiber-reinforced polyester: polyester laminate with a chemical-resistant gel coat on exposed faces, flame-spread index of 25 or less according to ASTM E84;
.11 Polypropylene: extruded to molding compound standard according to ISO 19069-1; Food compliance by FDA;
.12 The removable front filler panels between the top of the hoods and the underside of ceilings are permitted to be in thermoset melamine panels with polypropylene edgebanding.

2.3 Laboratory Fume Hoods

.1 Fume hood types in order of preference, as per project requirements:

.1 Ultra Low Flow VAV Fume Hoods:

.1 The term "ultra low flow" should only be attributed to a fume hood that can guarantee proper containment (level of cross contamination) equal or superior to the highest standards published by the ASHRAE 110 protocol with a maximum face velocity of 60 feet per minute (0.3 m/s). This coming from AI «As Installed» or AU «As Used» tracer gas containment testing results. AM «As Manufactured» testing will not be considered nor accepted because this type of testing does not consider any environmental conditions of the lab space in question.

.2 Variable Air Volume (VAV) Fume Hoods:

.1 Combined with an HVAC control system to vary the hood's exhaust rate to maintain a constant average face velocity throughout the sash level.

.3 Constant Air Volume Fume Hoods:

.1 Equipped with an air deflector system that controls the incoming air velocity, thus providing a constant air exhaust volume.

.2 Fabrication requirements:

.1 Laboratory Fume Hoods must be manufactured with factory applied paint finish on all exterior surfaces, including the back;

.2 Laboratory Fume Hood must be double wall construction and consisting of an exterior shell and a corrosion resistant interior lining on a self-supporting heavy-duty

.2 Stainless steel:
.1 All welded construction, ground smooth,
.2 Integral with interior panels surface,
.3 With seamless coved corners of 12mm radius;

.2 Integrated sink:
.1 If a sink is required it must be integrated to the work surface with seamless joints.

.5 Light fixture:
.1 Mounted on the exterior of the fume hood;
.2 Isolated from the interior of the fume hood by a safety lens resistant to heat and vapors;
.3 Serviced from the outside of the hood;
.4 Providing at least 860 lux (80 foot candles) at work surface;
.5 Switch flush-mounted in side post, in vapor proof / waterproof box;
.6 Light fixture must be T-8 fluorescent rapid start or LED.

.6 Baffles:
.1 Must be of the same material as the interior panels;