PART 1 GENERAL

1.1 References

.1 CAN/CGSB-19.1-M87, Putty, Linseed Oil Type.

.2 CAN/CGSB-19.2-M87, Glazing Compound, Non-hardening, Modified Oil Type.

.3 CGSB-19-GP-5M-76, Sealing Compound, One Component, Acrylic Base.

.4 CAN/CGSB-19.6-M87, Caulking Compound, Oil Base.

.5 CAN/CGSB-19.3-M87, Sealing Compound, One Component, Elasometric Chemical Curing.

.6 CAN/CGSB-19-GP-14M-76, Sealing Compound, One Component, Butyl-Polyisobutylene Polymer Base, Solvent Curing.

.7 CAN/CGSB-19.17-M90, One Component Acrylic Emulsion Base Sealing Compound.

.8 CAN/CGSB-19.18-M87, Sealing Compound, One Component, Silicone Base, Solvent Curing.

.9 CAN/CGSB-19.21-M87, Sealing and Bedding Compound Acoustical.

.10 CAN/CGSB-19.22-M89, Mildew Resistant Sealing Compound for Tubs and Tiles.

.11 CAN/CGSB-19.24-M90, Multi-Component, Chemical Curing Sealing Compound.

1.2 Delivery, Storage And Handling

.1 Deliver and store materials in original wrappings and containers with manufacturer's seals and labels intact. Protect from freezing, moisture, water and contact with ground or floor.

1.3 Environmental And Safety Requirements

.1 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage and disposal of hazardous materials and regarding labelling and provision of material safety data sheets acceptable to Labour Canada.

.2 Conform to manufacturer's recommended temperatures, relative humidity, and substrate moisture content for application and curing of sealants including special conditions governing use.

.3 Ventilate Work areas as directed by Contract Administrator by use of approved portable supply and exhaust fans.

PART 2 PRODUCTS

2.1 Sealant Materials

.1 Sealants and caulking compounds must:

.1 Meet or exceed all applicable governmental and industrial safety and performance standards.

.2 Be manufactured and transported in such a manner that all steps of the process, including the disposal of waste products arising there from, will meet the requirements of all applicable governmental acts, bylaws and regulations including, for facilities located in Canada, The Fisheries Act and the Canadian Environmental Protection Act (CEPA).

.2 Sealant and caulking compounds must not be formulated or manufactured with aromatic solvents, fibrous talc or asbestos, formaldehyde, halogenated solvents, mercury, lead, cadmium, hexavalent chromium, barium or their compounds, except barium sulfate.

.3 Sealant and caulking compounds must not contain a total of volatile organic compounds (VOC) in excess of 5% by weight as calculated from records of the amounts of constituents used to make the product.

.4 Sealant and caulking compounds must be accompanied by detailed instructions for proper application so as to minimize health concerns and maximize performance, and information describing proper disposal methods.

.5 Caulking that emits strong odours, contains toxic chemicals or is not certified, as mould resistant shall not be used in air handling units.

.6 When low toxicity caulks are not possible, confine usage to areas which off-gas to the exterior, are contained behind air barriers, or are applied several months before occupancy to maximize off-gas time.

.7 In the selection of the products and materials of this section preference will be given to those with the following characteristics: non-flammable, low Volatile Organic Compound (VOC) content, manufactured without compounds which contribute to ozone depletion in the upper atmosphere, does not contain methylene chloride, does not contain chlorinated hydrocarbons.

.8 Sealants acceptable for use on this project except CAN/CGSB-19.1 and CAN/CGSB-19.18 must be listed on CGSB Qualified Products List issued by CGSB Qualification Board for Joint Sealants. Where sealants are qualified with primers, use only these primers.

2.2 Sealant Material Designations

.1 Neoprene or Butyl Rubber.

.1 Round solid rod, Shore hardness 70.

.2 High Density Foam

.1 Extruded closed cell polyvinyl chloride (PVC), extruded polyethylene, closed cell, Shore A hardness 20, tensile strength 140 to 200kPa, extruded polyolefin foam, 32 kg/m3 density, or neoprene foam backer, size as recommended by manufacturer.

.3 Bond Breaker Tape

.1 Polyethylene bond breaker tape, which will not bond to sealant.

.4 Polyurethane Sealant

.1 CAN 19.13-M87; single component, high performance, non-sagging, low modulus, non-staining and non-bleeding. To be used at all exterior and interior control/expansion joints and on the exterior side of all window/door frames perimeters. Colour as selected by the Contract Administrator. Standard of acceptance: Tremco Dymonic or approved equal in accordance with B7.

.5 Latex Sealant

.1 CGSB19GP-17M; single component, non-sagging, non-bleeding, moisture curing. To be used on the interior side of all exterior window/door frame perimeters and at all interior window/door frame perimeters. Colour as selected by the Contract Administrator. Standard of acceptance: Tremco 200 latex or approved equal in accordance with B7.

.6 Silicone Sealant

.1 CGSB 19-GP-9M; single component, fungus resistant, non-sagging, non-staining, non-bleeding, moisture curing. To be used in all sloped glazing, skylights, and at all joints between vanities, countertops, backsplashes, and adjacent wall materials and at the joint between bathtubs and finish flooring in washrooms. Colour as selected by the Contract Administrator. Standard of acceptance: Tremco Proglaze or approved equal in accordance with B7.

2.3 Joint Cleaner

.1 Non-corrosive and non-staining type, compatible with joint forming materials and sealant recommended by sealant manufacturer.

.2 Primer: as recommended by manufacturer.

PART 3 EXECUTION

3.1 Protection

.1 Protect installed Work of other trades from staining or contamination.

3.2 Preparation Of Joint Surfaces

.1 Examine joint sizes and conditions to establish correct depth to width relationship for installation of backup materials and sealants.

.2 Clean bonding joint surfaces of harmful matter substances including dust, rust, oil, grease and other matter, which may impair Work.

.3 Do not apply sealants to joint surfaces treated with sealer, curing compound, water repellent, or other coatings unless tests have been performed to ensure compatibility of materials. Remove coatings as required.

.4 Ensure joint surfaces are dry and frost free.

.5 Prepare surfaces in accordance with manufacturer's directions.

3.3 Priming

.1 Where necessary to prevent staining, mask adjacent surfaces prior to priming and caulking.

.2 Prime sides of joints in accordance with sealant manufacturer's instructions immediately prior to caulking.

3.4 Backup Material

.1 Apply bond breaker tape where required to manufacturer's instructions.

.2 Install joint filler to achieve correct joint depth and shape, with approximately 30% compression.

3.5 Mixing

.1 Mix materials in strict accordance with sealant manufacturer's instructions.

3.6 Application

.1 Sealant

.1 Apply sealant in accordance with manufacturer's written instructions.

.2 Mask edges of joint where irregular surface or sensitive joint border exists to provide neat joint.

.3 Apply sealant in continuous beads.

.4 Apply sealant using gun with proper size nozzle.

.5 Use sufficient pressure to fill voids and joints solid.

.6 Form surface of sealant with full bead, smooth, free from ridges, wrinkles, sags, air pockets, and embedded impurities.

.7 Tool exposed surfaces before skinning begins to give slightly concave shape.

.8 Remove excess compound promptly as Work progresses and upon completion.

.2 Curing

.1 Cure sealants in accordance with sealant manufacturer's instructions.

.2 Do not cover up sealants until proper curing has taken place.

.3 Clean Up

.1 Clean adjacent surfaces immediately and leave Work neat and clean.

.2 Remove excess and droppings, using recommended cleaners as Work progresses.

.3 Remove masking tape after initial set of sealant.