1. GENERAL

1.01 SECTION INCLUDES

.1 Sleeves, sealing of sleeves and openings, as required for all electrical work.

1.02 SUBMITTALS

.1 Submit data sheets for firestopping in accordance with Section 01 33 00.

.2 Submit copies of firestopping drawings with ULC certificate and system number for each specific installation.

.3 Submit schedule of opening locations and sizes, penetrating items, and required listed design numbers to seal openings to maintain fire resistance ratings.

.4 Submit dimensioned location drawings indicating required sleeves and formed openings in structural poured concrete or precast concrete construction or in roofing, and locations of cutting or drilling required for Electrical work.

2. PRODUCTS

2.01 SLEEVES

.1 Galvanized steel sleeves:

.1 24 gauge with an integral flange at one (1) end to secure sleeve to formwork construction.

.2 Schedule 40 pipe.

.2 Schedule 40 PVC sleeves.

2.02 SLEEVE SEALS

.1 Manufacturers

.1 Hilti Canada.

.2 Specified Technologies Inc.

.3 3M Canada Inc.

.4 Tremco.

.5 A/D Fire Protection Systems.

.6 Nelson.

.2 Asbestos-free, elastomeric materials and intumescent materials, tested, listed, and labelled by ULC in accordance with CAN/ULC-S115, and CAN/ULC-S101 for installation in ULC designated firestopping, and smoke seal systems to provide a positive fire, water and smoke seal and a fire resistance rating (flame, hose stream and temperature) no less than fire rating for surrounding construction.

.3 Materials are to be compatible with abutting dissimilar materials and finishes and complete with primers, damming and back-up materials, supports, and anchoring devices in accordance with firestopping manufacturer's recommendations and ULC tested assembly. Coordinate material requirements with trades supplying abutting areas of materials.

.4 Maintain fire rating of separation in accordance with architectural drawings.

3. EXECUTION

3.01 INSTALLATION

.1 Where conduits and conductors pass through structural poured concrete, provide sleeves of type suitable for application, and approved by local governing codes.

.2 Sleeves in concrete slabs, except as noted below, are to be No. 24 gauge or equivalent, with an integral flange to secure sleeves for formwork construction.

.3 Sleeves in waterproof concrete slabs and in other slabs where waterproof sleeves are required are to be lengths of Schedule 40 pipe sized to extend 100 mm (4") above floor.

.4 Sleeves in poured concrete walls and foundation are to be Schedule 40 pipe.

.5 Through interior walls, use standard weight steel pipes, conduit, or galvanized steel. Cut flush with finished surfaces. Check room finish schedules.

.6 Through exterior walls above grade, floors, and roof use standard weight steel pipes, machine cut, flush with finished surface inside and to suit flashing outside.

.7 Through exterior walls below grade, water-proofed floors, and other water-proof walls, use heavy weight cast iron pipes, machine cut. Extend sleeves 100 mm (4") above finished floors, and cut flush with underside of floor.

.8 Size sleeves, unless otherwise noted, to leave 13 mm (1/2") clearance around conduit, duct, conductor, etc. Void between sleeves and conduit, duct, conductors, etc., to be packed and sealed for length of sleeves as in accordance with article entitled "Sleeve Seals" specified in this Section. Pack and seal sleeves set in exterior walls with governing authority approved materials suitable for application and pack both ends of sleeves watertight with approved permanently flexible and water tight materials. Coordinate exact responsibility of work with General Trades Contractor.

.9 Submit to concrete reinforcement detailer at proper time, drawings indicating required sleeves, recesses and formed openings in poured concrete work. Completely and accurately dimension such drawings and relate sleeves, recesses and formed openings to suitable grid lines and elevation datum.

.10 Supply sleeves of a water protecting type in accordance with detail found on drawings for installation in following locations:

.1 in Mechanical and Fan Room floor slabs, except where on grade;

.2 in slabs over Mechanical, Fan, Electrical and Telephone Equipment Rooms or closets;

.3 in floors equipped with waterproof membranes.

.11 "Gang" type sleeving to be permitted only with approval of Owner and reviewed with the Consultant.

.12 Terminate sleeves for work which is exposed, so that sleeve is flush at both ends with wall, partition, or slab surface such that sleeve may be covered completely by escutcheon plates.

.13 Sleeves are not required in interior walls and dry area floors where conduit is installed ahead of floor construction.

.14 Seal all openings and sleeves after installation of equipment:

.1 With an approved material to maintain fire rating where sleeves and openings pass through fire separations and floors.

.2 With an approved material to maintain fire rating for sleeves and openings provided for future equipment.

.3 Flash all conduits and systems passing through roof or built into an outside wall, or a waterproof floor.

.4 Provide copper flashing for sleeves passing through exterior walls or waterproof floors.

.15 Provide all flashing and waterproofing for sleeves through roof and exterior walls to the requirements of Division 07.

.16 Firestop sleeves in accordance with the manufacturer's specifications and recommendations.

End of Section