



ACTS TRADE DEFINITIONS

Revised
2011 MARCH 25

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INTRODUCTION

Trade Definitions are owned by the Alberta Construction Association and were originally prepared by the now defunct Alberta Construction Tendering System, hereinafter referred to as ACTS, and various trade associations, to identify work to be included or excluded in the bids of trade contractors bidding under the Rules and Regulations of ACTS. **THEY ARE INTENDED TO SUPPLEMENT THE SPECIFICATIONS. TRADE DEFINITIONS DO NOT PUT WORK INTO NOR EXCLUDE WORK FROM A PRIME CONTRACT, BUT WHERE WORK IS INCLUDED IN THAT CONTRACT BY A SPECIFICATION, THE TRADE DEFINITIONS DESIGNATE WHICH CONTRACTOR IS RESPONSIBLE TO DO THAT WORK.**

Tabulating items to be included in bids provides a common basis upon which tendering becomes truly competitive and fair to all concerned. To assist in the use and application of the definitions the following guides are recommended:

USERS GUIDE TO ABBREVIATIONS

BCC	Building Centralization Control
CSA	Canadian Standards Association
DX	Direct Expansion
EMS	Energy Management System
FOB	Free On Board
HVAC	Heating, Ventilating and Air Conditioning
ULC	Underwriter's Laboratory Canada
VAV	Variable Air Volume

PILING TIMBER; PIPE; STEEL; SHEET AND PRECAST CONCRETE

DEFINITION:

This tender shall be for the supply and installation of timber, pipe, steel sheet and precast concrete piling and all components necessary for a complete installation;

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Concrete within pipe piles;
2. Equipment necessary to install the piles;
3. Guarantee;
4. Load testing of piles;
5. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the piling specifications;
6. Protection of concrete in piles from freezing;
7. Protection of other trades' work from damage by this trade;
8. Shop drawings;
9. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
10. Supply only of dowels;
11. Where a pile foundation is designed by a piling contractor he shall be responsible for the adequacy of the surrounding services and/or structures to withstand the vibrations or other effects of the piling installation proposed by the piling contractor.

EXCLUDED:

1. Building permits;
2. Concrete testing;
3. Hand trimming or cutting of tops and top treatment of piles or caissons. Straightening, cutting to specified elevations and removal of laitance from rebar;
4. Hoarding;
5. Inspection services;
6. Installation of dowels;
7. Pile caps;
8. Piles for site work not detailed on structural drawings such as light standards, fence posts, planters and sign bases;
9. Placing of pile dowels and anchor bolts;
10. Provision and maintenance of all lines and levels as required;
11. Provision and maintenance of stakes indicating pile locations;
12. Removal of man-made obstructions either below ground or overhead which interfere with the piling contractor's work;
13. Removal of tailings and pre-bore material;
14. Responsibility for damage to subsurface structures, services and utilities whose exact location has not been established and identified on the site by the purchaser prior to commencement of the piling work;
15. Shoring and protection of any banks, structures, services and utilities as well as continued maintenance and protection of same;
16. Supply and maintain complete access, egress and working surface suitable for the free movement of piling rigs and ancillary equipment;
17. Temporary heat, light, power, sanitation and water.

PILING

DRILLED CAST-IN-PLACE; EXPANDED BASE PILES

DEFINITION:

This tender shall be for the supply and installation of drilled cast-in-place and expanded base piling and all components necessary for a complete installation;

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Equipment necessary to install the piles;
2. Facilities and equipment for inspections;
3. Guarantee;
4. Load testing of piles;
5. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the piling specifications;
6. Protection of concrete in piles from freezing;
7. Protection of other trades' work from damage by this trade;
8. Shop drawings;
9. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
10. Supply only of dowels;
11. Where a pile foundation is designed by a piling contractor he shall be responsible for the adequacy of surrounding services and/or structures to withstand the vibrations or other effects of the piling installation proposed by the piling contractor.

EXCLUDED:

1. Building permits;
2. Concrete testing;
3. Extension of any piles above ground;
4. Hand trimming or cutting of tops of piles or caissons. Straightening, cutting to specified elevations and removal of laitance from rebar;
5. Hoarding;
6. Inspection services;
7. Installation of dowels;
8. Pile caps;
9. Piles for site work not detailed on structural drawings such as light standards, fence posts, planters and sign bases;
10. Placing of pile dowels and anchor bolts;
11. Provision and maintenance of lines and levels as required;
12. Provision and maintenance of stakes indicating pile locations;
13. Removal of man-made obstructions either below ground or overhead which interfere with the work in this scope;
14. Removal of tailings and pre-bore material;
15. Responsibility for damage to sub-surface structures, services and utilities whose exact location has not been established and identified by the purchaser prior to commencement of the piling work;
16. Shoring and protection of any banks, structures, services and utilities as well as continued maintenance and protection of same;
17. Supply and maintain complete access, egress and working surface suitable for the free movement of piling rigs and ancillary equipment;
18. Temporary heat, light, power, sanitation and water.

EXTERIOR LANDSCAPING

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Excavation of shrub beds and tree pits;
2. External irrigation systems, including sleeves, trenching and backfill: the mechanical contractor shall provide suitably sized water service to exterior of building, including such back-flow prevention devices, meters or other equipment as necessary to comply with all government codes and regulations (see Mechanical Section 2, 39 Included and Electrical 31 Included);
3. Fine grading and preparation of seed bed and sod bed;
4. Fine grading of sub grade and scarifying;
5. Guarantees;
6. Hoisting;
7. Maintenance of new landscape construction or as otherwise specified;
8. Material used for erosion control including jute, plastic and wire netting, rip rap up to 300 mm (not cemented in), complete with filter fabric weed barrier or poly membrane;
9. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the landscape specifications;
10. Pedestrian aggregate paths and trails;
11. Placing and spreading of on-site topsoil or topsoil obtained from specified location;
12. Protection of other trades' work from damage by this trade;
13. Roof landscaping over protected membrane roofing systems (see Roofing 30 Included);
14. Seeding and/or sodding as specified;
15. Supply and installation of landscape materials, i.e. bark chips, cedar chips, pine cones, aggregates, decorative rocks, ground covers, decorative wood post, wood bollards, landscape edgers, landscape fabric and landscape poly;
16. Supply and installation of play structures, athletic fixtures, bicycle stands and free-standing (not attached to building structure) benches, seats, tables and waste receptacles;
17. Supply and installation of plant material, trees, and shrubs;
18. Supply and installation of fertilizer and soil amendments as specified;
19. Supply and installation of tot lots, sand boxes including wood or precast concrete curbing, sand and gravel base, weeping tile to a mechanical connection or sump;
20. Supply and installation of tree grates and tree guards, precast concrete tree boxes, wooden and precast concrete planters;
21. Supply and installation of wood edgers, wooden and modular block retaining walls, trellis screening, wood, free standing or attached pagodas; wood, free-standing or attached pergolas; and wood, free-standing or attached gazebo.
22. Supply and spreading of imported topsoil and soil mix as specified;
23. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
24. Trade clean up;
25. Trees and shrubs specified to be moved and stored or moved to another location;
26. Use and application of specified horticultural materials, i.e. herbicides, pesticides, sterilants, lime, etc.;

EXCLUDED:

1. Asphalt paving and integral edging;
2. Concrete, except for precast concrete items specifically noted under included;
3. Gabion structures;
4. Indoor landscaping;
5. Interlocking pavers, paving stones, turf stones and sidewalk blocks including the excavation and compaction of sub grade, and supply and compaction of base;

EXTERIOR LANDSCAPING

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6. Metal tree grate frames;
7. Painting;
8. Precast concrete accessories required to match the building precast features;
9. Removal or disposal of excess top soil or sub soil from on-site stock piles;
10. Repair of landscape areas not specifically identified;
11. Tree demolition;
12. Water proofing or insulation of planters, parking structures or roof top landscaping;

REINFORCING STEEL - SUPPLY

DEFINITION:

This tender shall be for the supply F.O.B. truck at jobsite of all reinforcing steel bars and welded mesh or structural wire fabric required for poured-in-place concrete in accordance with tender drawings and specifications.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Epoxy coated rebar and patch kit;
2. Fabrication of bars; this shall include smooth rods for joints and threaded reinforcing bars cut, bent, bundled and tagged or colour coded;
3. Mechanical and exothermic couplers - (supply only, machinery and labour to install not included.);
4. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the specifications pertaining to this work;
5. Preparation of placing drawings and bar lists;
6. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
7. Supply reinforcing steel for concrete filled masonry and du-al and similar type blocks;
8. Supply of welded wire mesh or structural wire fabric in flat sheets or rolls;
9. Support and/or spacer bars when specified or specifically shown on the drawings;
10. Welded wire mesh or structural wire fabric for concrete encased conduits or duct-work shall be quoted on a unit price basis unless specific quantities are given.

EXCLUDED:

1. Accessories for masonry or du-al or similar type blocks, including 9 ga. wire ties or similar type ties;
2. Dywidag or equivalent bars;
3. Ebea continuity strip;
4. Inspection or testing;
5. Light gauge forms and temperature reinforcement when specified to be included in the structural steel documents (see Structural Steel 29 Included);
6. Placing, placing accessories, tie wire and epoxy coated tie wire, inserts, post tensioning cables, accessories and supports;
7. Reinforcing steel used in drilled cast-in-place piles, dynamically cast-in-place piles and pipe piles;
8. Supply of caisson and pile dowels.

REINFORCING STEEL - PLACEMENT

DEFINITIONS:

Installation shall mean providing labour only to facilitate the receiving, unloading, handling and storage of reinforcing steel material at the project site, including moving to final location, assembling, pre-assembling, installation, initial correction and adjustment.

Hoisting shall mean raising and lowering only of all reinforcing steel materials on site from delivery trucks, site storage areas and pre-assembly areas to another designated place at the work site. Hoisting includes equipment and operator but does not include labour or rigger.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Guarantee;
2. Installation of mechanical and exothermic couplers, including machinery and labour to install;
3. Installation of reinforcing steel and welded wire fabric;
4. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the specifications pertaining to this work;
5. Protection of other trades' work from damage by this trade;
6. Supply and installation of accessories tie wire and epoxy coated tie wire;
7. Supply all materials required for temporary and/or permanent connection of the component parts of the reinforcing steel;
8. Supply and installation of support and spacer bars not specified nor specifically shown on the drawings;
9. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
10. "Touching Up" of epoxy coated reinforcing bars;
11. Trade clean up;
12. Tying reinforcing into cages for masonry where shown on drawings (see Masonry 4 Excluded).

EXCLUDED:

1. Caisson and pile dowels;
2. Expansion sleeves, caps, wrapping, greasing and accessories;
3. Field welding;
4. General and final clean up;
5. Hoarding;
6. Hoisting;
7. Inserts;
8. Lifting of mesh during pouring of concrete;
9. Lines, templates and grades;
10. Placing bars and supply and placing of accessories to du-al or similar type blocks;
11. Post tension cables, accessories, supports and anchorage reinforcement;
12. Reinforcing steel for masonry including dowels;
13. Temporary heat, light, power, sanitation and water;
14. Tying reinforcing steel to water stops;
15. Scaffolding which supports concrete formwork.

MASONRY

DEFINITION:

This tender shall be for the supply and installation of Brick, Tile, Stone and Concrete Block Construction.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Anchors & ties;
2. Brick, new and used;
3. Building paper used behind masonry facing;
4. Building-in of miscellaneous metals (supplied by others) in masonry;
5. Built-in metal flashing - supplied by others;
6. Caulking (other than firestopping),(a) masonry to masonry and; (b) caulking of joints in masonry or masonry to other materials, including caulking where it forms part of the expansion or control joint, where masonry is the last work to be installed;
7. Cavity wall flexible sheet membrane, behind masonry, which forms part of the building air barrier or vapour barrier and where masonry is the last component to be installed, including connection to work of preceding trade where required. If connection is required by any trade following the masonry installation then the masonry contractor provides a maximum of 200 mm, unless otherwise specified, of overlap material beyond the exterior point of the masonry system;
8. Cavity wall insulation complete with adhesives, anchors, etc., behind masonry, where masonry is the last component to be installed;
9. Clay flue lining;
10. Clay tiles;
11. Cleaning of masonry;
12. Clear waterproofing of exterior masonry only (waterproofing is all clear finishes to masonry not included under Special Wall Coatings Scope) (see Painting 2 Excluded);
13. Concrete and grout fill in masonry only;
14. Concrete blocks, glued blocks and glass blocks;
15. Cutting required for other trades in new work only;
16. Damp proof course in masonry;
17. Demolition of existing masonry when the materials are to be re-used or retained as specified;
18. Guarantee;
19. Hoisting;
20. Inspection;
21. Installation only of precast concrete band courses, copings, sills and heads which fall within masonry cladding, including supply and installation of insulation and vapour barrier behind these items;
22. Loose fill or foam insulation in masonry;
23. Masonry laid with mortar containing bonding agents regardless of being pre-laid or otherwise;
24. Mortar;
25. Non-rigid and fabric flashing when built into masonry;
26. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the masonry specifications;
27. Parging of cavity masonry walls only when specified;
28. Protection of other trades' work from damage by this trade;
29. Reinforcing steel placed only in masonry - supplied by others to the job site, clearly tagged and identified as to end use;

MASONRY

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30. Scaffolding;
31. Shop drawings;
32. Stone (natural and artificial), granite, terracotta facing over 50 mm, including anchorages;
33. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
34. Testing of material of this trade where specifically called for in the masonry specifications;
35. Trade clean-up;
36. Weep hole and venting devices;
37. Wire reinforcing to mortar joints.

EXCLUDED:

1. Anchor slot;
2. Demolition, (except as per item 17 Included above);
3. Du-al blocks;
4. Fabrication and tying of reinforcing steel (see Reinforcing Steel - Placement 12 Included);
5. Firestopping;
6. General and final clean up;
7. Hoarding;
8. Installation of frames;
9. Lateral support devices on top of masonry walls;
10. Temporary heat (including mortar shack), light, power, sanitation and water;
11. Temporary support and shoring for lintels;
12. Welding;
13. Wind-bracing.

Note: Precast supply and installation, or installation only, shall be quoted as a separate price and does not come within scope of bid depository, with the exception of installation only of band courses, copings, sills and heads referenced under 21 Included.

STRUCTURAL STEEL

DEFINITION:

This tender, for the supply and erection of structural steel as defined in the latest CISC Code of Standard Practice For Structural Steel as listed below, shall include only the items from the following list which are clearly indicated to be required and are specifically detailed and located by the structural drawings.

Where structural drawings refer to other drawings for a specific item, the detail of that item, which is specifically detailed and located, shall be treated as if shown on structural drawings.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Anchors for structural steel;
2. Base plates and bearings for structural steel members;
3. Beams, purlins, girts;
4. Bearing plates and bearings for structural steel members and steel deck;
5. Bins and hoppers of 6 mm plate or heavier, if attached to the structural steel frame;
6. Bracing for steel members, trusses or frames;
7. Brackets attached to the structural steel;
8. Bridge bearings and grating, if connected to the structural steel members;
9. Cables for permanent bracing or suspension systems;
10. Canopy framing if attached to the structural steel frame;
11. Columns;
12. Conveyor galleries and supporting bents (exclusive of conveyor stringers, deck plate and supporting posts which are normally part of the conveyor assembly);
13. Crane rails and stops;
14. Curb angles and plates if attached to the structural steel frame;
15. Diaphragms for bridges;
16. Door frames if attached to the structural steel frame;
17. Embedded items connecting structural steel;
18. Expansion joints connected to the structural steel frame (excluding expansion joints for bridges);
19. Fabricated steel framing for curtainwalls and storefronts where attached to structural steel but not enclosed by architectural metal;
20. FIELD CONNECTION MATERIAL
 - (a) supply of all material required for temporary and permanent connection of the component parts of the structural steel;
 - (b) appropriate quality bolts and nuts (plus washers, if required) or special fasteners, of suitable size and in sufficient quantity for all field connections of steel-to-steel which are specified to be thus permanently connected, plus an over-allowance of two percent of each size to cover waste;
 - (c) welding electrodes, shims, levelling plates, fitting-up bolts and drift pins required for field connections;
21. Floor plates, roof plates (raised pattern or plain) and steel grating connected to the structural steel frame;
22. Girders;
23. Grillage beams of structural steel;
24. Hangers supporting structural steel framing;
25. Jacking girders;

STRUCTURAL STEEL

... continued

26. Lintels shown on the structural drawings;
27. Mechanical support framing shown on structural drawings (see Mechanical Section 1, items 3 & 4 Included);
28. Monorail beams of standard structural steel shapes;
29. Open-web steel joists, including anchors, bridging, headers and trimmers; also, when specified to be included in the structural steel documents, light-gauge forms and temperature reinforcement (see Reinforcing Steel Supply 5 Excluded);
30. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the structural steel specifications;
31. Sash angles attached to the structural steel frame;
32. Separators, angles, tees, clips and other detail fittings essential to the structural steel frame;
33. Shear connectors/studs, except when installed through sheet steel deck by deck installer;
34. Shelf angles attached to the structural steel frame;
35. Shop drawings and/or erection diagrams;
36. Shop fasteners or welds, and fasteners required to assemble parts for shipment;
37. Shop preparation and/or priming;
38. Steel tubes or cores for composite columns;
39. Steel window sills attached to the structural steel frame;
40. Struts;
41. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
42. Suspended ceiling supports of structural shapes at least 75 mm in depth;
43. Temporary components to facilitate transportation to the site;
44. Tie, hanger and sag rods forming part of the structural steel frame;
45. Trusses;

Erection shall INCLUDE:

1. Guarantee;
2. Hoisting;
3. Inspection;
4. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the specifications pertaining to this work;
5. Protection of other trades' work from damage by this trade;
6. Scaffolding;
7. Trade clean up;

Erection shall EXCLUDE:

1. General and final clean up;
2. Hoarding;
3. Loose bolts other than for fastening items of structural steel;
4. Placing of embedded items;
5. Steel deck regardless of specification;
6. Supply and installation of grouting;
7. Supply and/or installation of shear connectors which penetrate steel deck;
8. Temporary heat, light, power, sanitation and water;
9. V-rib pans;

STRUCTURAL STEEL

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STRUCTURAL STEEL ITEMS SUPPLIED BY OTHERS: The following steel or other items shall not be supplied by the fabricator:

1. Bolts for wood lagging;
2. Bins and hoppers not covered in 5 Included;
3. Bridge bearings not connected to structural steel items;
4. Canopy framing not attached to structural steel;
5. Catch basin frames;
6. Concrete for filling HSS columns. Concrete is to be supplied and poured in columns by others in the shop or field with the co-operation of the structural steel trade;
7. Connection material for other trades (e.g. precast concrete);
8. Conveyor stringers, deck plate and supporting posts;
9. Drain pipes;
10. Door and corner guards;
11. Door frames not covered in 16 Included;
12. Drilling of holes into masonry or concrete, including core drilling of anchor bolts for bridges and drilling for deck support angles;
13. Edge forming less than 2.0 mm or 14 gauge thickness for steel deck;
14. Embedded steel parts not required for structural steel or deck;
15. Embedded steel parts in precast concrete;
16. Flagpoles and supports;
17. Floor plates, roof plates and grating not covered in 21 Included;
18. Grout;
19. Hoppers and chutes;
20. Hose and tire brackets;
21. Installation of embedded parts;
22. Lag bolts, machine bolts and shields or inserts for attaching shelf angles, trimmer angles and channels to masonry or concrete;
23. Lintels over wall recesses;
24. Lintels which are an integral part of door frames not attached to the structural steel frame;
25. Machine bases, rollers and pulleys;
26. Members made from gauge material except cold-formed channels 75 mm or more in depth and 1.22 mm or more in thickness;
27. Metal clad doors and frames;
28. Miscellaneous steel;
29. Shear connectors through sheet steel deck by deck installer;
30. Sheet steel cladding;
31. Sheet steel deck;
32. Sheet steel flashing;
33. Shelf angles not covered in 34 Included;
34. Shoring under composite floors and stub girders;
35. Steel doors;
36. Steel sash;
37. Steel stacks;
38. Steel stairs, landings, walkways, ladders and handrails;
39. Steel tanks and pressure vessels;
40. Steel window sills not covered in 39 Included;
41. Support for sheet steel deck at column cut outs and for openings not requiring framing connected to structural steel;
42. Temporary bracing for other trades;
43. Trench covers;
44. Trim angles, eave angles or fascia plates not directly attached to the structural steel frame;

MISCELLANEOUS STEEL

DEFINITION:

This tender shall be for the supply F.O.B. truck at jobsite and placement of miscellaneous steel of ferrous metal only, fabricated from 2.0 mm (14 ga.) metal and heavier including galvanizing, cadmium plating and chrome plating for items fabricated by this trade only, but not stainless steel and cast iron items.

The scope of this trade is to be read in conjunction with the Structural Steel scope and shall include all steel items not included in the Structural Steel scope, which are clearly indicated to be required and are specifically detailed and located, regardless of where they may appear in the Architectural or Structural documents unless specifically noted otherwise in this scope.

SUPPLY This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Access doors and frames - except trade-name items and those required for servicing mechanical and electrical equipment;
2. Angles and channel frames for doors and wall openings - drilling and tapping to be specified as being done by others;
3. Benches and brackets;
4. Bolts - only includes those bolts and anchors required for anchoring miscellaneous steel supplied under this division;
5. Bumper posts and rails;
6. Burglar/security bars;
7. Clothes line poles, custom fabricated types only;
8. Coat rods, custom fabricated types only;
9. Corner protection angles;
10. Expansion joint angles, plates, etc. This to include types made from steel, or a combination of steel and non-ferrous metal;
11. Fabricated convector frames and enclosures;
12. Fabricated items where clearly detailed or specified and made from 2.0 mm (14 ga.) and heavier steel, except where included by another trade scope;
13. Fabricated steel framing for curtain walls and storefronts where not detailed on structural drawings and not enclosed by architectural metal;
14. Fabricated wire mesh and expanded metal partitions and screens;
15. Fire escapes;
16. Flag poles - steel;
17. Custom fabricated foot-scrapers, mud and foot grilles, including pans, but less drains;
18. Frames, grating and plate covers for manholes, catch basins, sumps, trenches, hatches, pits, etc., except cast iron; frames and covers and trade-name floor and roof drains (see Mechanical Section 2, 10 Included);
19. Gates, grilles, grillwork and louvres, excluding baked enamel or when forming part of mechanical system (see Mechanical Section 3, 54 Included);
20. Grating type floors and catwalks - excluding those forming part of mechanical system (see Mechanical Section 1, 4 Included);
21. Handrails, balusters and any metal brackets attached to steel rail including plastic cover, excluding steel handrails noted to be part of structural steel framing;
22. Joist hangers, custom fabricated types only;
23. Joist strap anchors;

MISCELLANEOUS STEEL

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24. Lintels;
25. Mat recess frames, custom fabricated types only;
26. Mobile chalk and tackboard frames, custom fabricated types only;
27. Monorail beams of standard shapes, excluding trade name items, unless shown on structural drawings;
28. Shop drawings and/or erection diagrams;
29. Shop preparation and/or priming;
30. Sleeves if specified, except for mechanical and electrical trades;
31. Stair nosing, custom fabricated types only;
32. Steel ladders and ladder rungs not forming part of structural steel or mechanical work (see Mechanical Section 1, 4 Included);
33. Steel stairs and landings not forming part of structural steel;
34. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
35. Table and counter legs, frames and brackets, custom fabricated types only;
36. Thresholds and sills, custom fabricated types only;
37. Vanity and valance brackets, custom fabricated types only;
38. Weatherbars - steel;

EXCLUDED:

1. Bases and supports for mechanical and electrical equipment where detailed on mechanical or electrical drawings only;
2. Bolts other than for anchoring items of miscellaneous steel as defined in 4 Included;
3. Cast iron frames and covers for manholes and catch basins;
4. Chain link and woven wire mesh;
5. Glulam connections and anchorages except when attached to miscellaneous steel, e.g. columns;
6. Joist hangers, trade-name types;
7. Metal cladding and covering, lighter than 2.0 mm (14 ga.);
8. Precast concrete connections and anchorages in building structure;
9. Reinforcing steel or mesh;
10. Roof and floor hatches when trade-name items;
11. Sheet metal items, steel decking and siding and their attachments, closures, etc. lighter than 2.0 mm (14 ga.);
12. Shoring under composite floors;
13. Steel stacks;
14. Steel reinforcement for architectural metal storefronts, curtainwalls and windows;
15. Stone anchors - see Masonry and Tile, Terrazzo, Marble & Granite scopes;
16. Temporary bracing for other trades;
17. Thimbles and breeching - by mechanical contractor, also mechanical fire dampers;
18. Window and area wells.

MISCELLANEOUS STEEL

PLACEMENT

This contractor shall include and exclude the following items regardless of where they may appear in the Architectural or Structural documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Guarantee;
2. Hoisting;
3. Inspection;
4. Installation of stairs, handrails, wall rails which require field welding for installation and other steel items which require field welding for installation;
5. PC sums and/or contingency funds when a specific dollar amount is listed in the miscellaneous steel specifications;
6. Protection of other trades' work from damage by this trade;
7. Scaffolding;
8. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
9. Supply of all materials and equipment required for temporary and/or permanent connection of the component parts of the miscellaneous steel;
10. Trade clean up;
11. Welding to install or join together supplied items which require field welding or assembly or would be unreasonable to be shipped in one piece for others to install;

EXCLUDED:

1. Coring and grouting;
2. General and final clean up;
3. Hoarding;
4. Placing of embedded items;
5. Steel deck regardless of specifications;
6. Temporary heat, light, power, sanitation and water;
7. Any items which do not require field welding for installation;

ARCHITECTURAL WOODWORK - SUPPLY

DEFINITION:

This tender shall be for the supply of architectural woodwork, in a finished state, F.O.B. truck at jobsite, built-up or knocked-down depending on job conditions.

Finished state means surfaces are to be sanded, dusted, cleaned and marks, stains and spots removed, ready for receipt of any specified undercoat and finish coat, or where specified to be shop applied finished, with the finish already applied, or constructed from a prefinished material (standing and running trim or site constructed millwork not included). In addition to above, when finish is specified to be shop applied then this contractor shall also fill nail holes.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

EXTERIOR

- A1 Clear wood preservative where specified (see B35);
- A2 Exterior moulding, fascia, and trim from clear "D and Better, first and seconds" material. Random length-only (see B12, B54);
- A3 Glass and plastic glazing including sealed units and removable double glazing panels installed where it occurs in architectural woodwork. Factory or site installation at architectural woodwork contractor's option (see B18, B54);
- A4 Ornamental wood columns, posts, brackets, (including half timbering), if specified of clear kiln dried "D and Better, first and seconds" material;
- A5 Supply and/or installation of materials and other work that may be assigned by pretender ruling;
- A6 Plywood (including overlay faced type) where detailed with solid wood edging. Supplied in 2400 mm lengths, unless otherwise specified (see B11, B12);
- A7 Wood doors, including plastic laminate or fibreboard faced-doors and cores for metal clad one side (metal cladding, fitting or machining for hardware not included). Exterior wood patio sliding doors with hardware (see B10, B42);
- A8 Wood Screens or shutters, wood vents, louvres or sun baffles, wood seats, benches or planters, if specified of clear kiln dried "D and Better, first and seconds" material. (No metal parts included other than implanted rods in seats and benches);
- A9 Wood stairs (stringers long and knocked-down), handrails, railings and balustrades (not cut to length) if specified of clear kiln dried "D and Better" material (see B43);
- A10 Custom designed wood window frames and sash, door frames complete with wood trim including wood, fibreboard panels and insulation to same. Wood sash to be factory fitted, including supply and installation of workable sash hardware, weather stripping and flyscreens to same (see B16, B32, B54);

INTERIOR

- A11 Computer keyboard trays and CPU holders whether factory fabricated or trade name;
- A12 Custom built wood and/or plastic laminate or plastic laminate covered push and pull bars and guard rails to both wood and metal doors and frames (no metal fastening devices) (see B52);
- A13 Glass and plastic glazing and fibreboard supplied and installed where it is completely surrounded by architectural woodwork and in wood doors, including sealed units and/or removable glazing panels;
- A14 Hardwood plywood, (unfinished, or brand name pre-finished if specified) for all wall or ceiling panelling (no backing material) (see B22);
- A15 Interior wood trim to metal or trade name windows as, and if, detailed on drawings;
- A16 Mirrors where installed in wood frames;

ARCHITECTURAL WOODWORK – SUPPLY

... continued

- A17 Openings cut out, wood mouldings and glass supplied and fitted in wood doors (does not include metal glazing stops unless specified);
- A18 Openings cut out and wood mouldings supplied and fitted for metal grilles in wood doors (does not include metal grilles or installation of same);
- A19 Cash Allowance and/or contingency funds when a specific dollar amount is listed in the architectural woodwork specifications for supply (see B 16);
- A20 Plastic laminate and fibreboard base and kick plates to architectural woodwork. (Supplied only, no screws or material for attaching);
- A21 Plastic laminate wall rails and window stools when applied to wood substrate. Plastic laminate coverings to walls, ceilings and metal doors (strapping, backing, glue, and installations not included). Plastic laminate panelling complete with wood substrate where specifically called for "factory fabricated" (see B22);
- A22 Pressure treated fireproofing of architectural woodwork items where specified. Does not include sanding after treatment (see B35);
- A23 Factory applied finishes to architectural woodwork, when specified, excluding site touch-up. Matching materials to be provided by this trade to others for site touch-up (see B35);
- A24 Supply and/or installation of materials and other work that may be assigned by pretender ruling;
- A25 Toilet and shower partitions of wood and plastic laminate covered, complete with hardware (see B45);
- A26 Venetian blinds between the glass in wood frames or sash if wood frames are supplied by the architectural millwork supplier;
- A27 Wood and plastic faced cabinets, complete with wood bases and splashback, tables, benches (items constructed from dimensional lumber not specified of clear kiln dried "D and Better" material regardless of location-not included), pews, seats, desks, shelving, convactor covers of wood and plastic laminate attached to architectural woodwork. **NOTE:** The following hardware to architectural woodwork (casework only) whether specified under Cash Allowance or not is included in this tender: drawer slides and shelf standards (factory installed), clips (supplied only), lazy susans (factory installed); workable cabinet hardware, limited to hinges, catches, pulls, locks, casters, sliding door tracks, sheaves or glides (supplied and factory installed). Jobsite adjusting of hardware is not included (see B16, B18, B47);
- A28 Wood boards, interior siding, battens and mouldings where exposed to view for decorative and display purposes (any grade) (see B9, B22);
- A29 Wood display cases supplied only as architectural woodwork factory fabricated fixture including glass, standards, brackets and sliding track. Interior lining other than wood and plastic laminate material not included. **NOTE:** To jobsite built showcases; plastic laminate, hardwood and wood trim only supplied loose for jobsite fitting (see B2, B16);
- A30 Wood doors, bifold doors (only brand name wood bifold doors will be supplied with the required hardware the manufacturer includes with the doors), plastic laminate, overlay plywood or fibreboard faced, mineral core, sound rated doors c/w seals when specified, lead lined doors and cores for metal clad one side. (Hardware for doors, bevelling, fitting or machining for hardware or other specialty doors not included) (see B10, B42, B46);
- A31 Wood eggcrate ceiling panels or other types of wood diffusers where supplied separately from lighting fixtures for luminous ceilings and valance and cove lighting (see Electrical 21 Excluded);
- A32 Wood frames, borrowed light frames, and wood sash complete with workable hardware (see B16);
- A33 Wood ironing boards in wood cabinets (including workable hardware);
- A34 Wood lockers (see also B5);
- A35 Wood or wood composite mouldings, rails, random lengths unless otherwise specified (no end trimming or factory assembling);
- A36 Wood, plastic laminate, fibreboard, polymer, plastic and synthetic marble counter tops, including splashback, aluminium moulding for same, or self-edge, (no jobsite labour). Wood counter tops for metal cladding (no cladding). (Does not include glue for jobsite installation) (see B7, B8, B25 & B27);

ARCHITECTURAL WOODWORK - SUPPLY

...continued

- A37 Wood, plastic, or wood-and-metal tote drawers or trays in architectural woodwork cabinets including metal or wood slides;
- A38 Wood shelves for metal standards or metal frames where detailed (no metal framing, standards, or brackets);
- A39 Wood stairs (knocked-down with stringers long), wood balustrades and handrails (not cut to length), wood plugs included;
- A40 Wood or wood composite trim for notice or bulletin boards (see B2);
- A41 Wood or wood composite valances, including plastic laminate faced, plywood or overlay plywood type, solid wood or plastic laminate, (not including blocking unless specified as clear material).
- A42 Shop Drawings

EXCLUDED:

- B1 Caulking whatsoever or door weather-stripping;
- B2 Chalkboard, whiteboard, tackboard or corkboard of any kind (see A29, A40);
- B3 Cleaning of glass or plastic (other than confined areas);
- B4 Cloth, burlap, or vinyl fabric of any kind;
- B5 Coat rods or coat hooks or supports for coat rods/hooks of any material except wood;
- B6 Counter balanced hardware to interior pass through doors;
- B7 Counter tops with integral sink or basin, including counter tops, splash-backs and fascia of the same material connected thereto (see Mechanical Section 2, 2 Included);
- B8 Cutting of holes for metal grilles, grommets, sinks, specialty items, or electrical and mechanical fittings into architectural woodwork fixtures (see A36);
- B9 Decking or sheathing to walls, ceilings, floors (see A28);
- B10 Door cores, frames, or trim for metal cladding (see A7, A30);
- B11 Exterior plywood other than edged plywood (see A6);
- B12 Exterior wall facing, siding, fascia siding, or soffit materials other than trim and edged plywood, items constructed from dimensional lumber not specified of clear kiln dried "D and Better" material regardless of location (see A2 and A6);
- B13 Fence and sidewalk material;
- B14 Glass blocks;
- B15 Glue or adhesive for jobsite installation;
- B16 Hardware or installation or machining for same, except to sash and cabinets (see A10, A19, A25, A27, A29, A32);
- B17 Items or materials not constructed entirely of wood or composite materials containing wood fiber other than those listed as included;
- B18 Jobsite assembly and/or installation and/or fitting of architectural woodwork (see A27);
- B19 Linoleum, carpet, tile or any other floor covering material for covering of wood fixtures, cabinets or stairs, or metal trim for same;
- B20 Machining, bevelling or fitting of doors to receive hardware, (except fire rated doors);
- B21 Materials for floor covering of any kind;
- B22 Materials for interior coverings to walls, beams, ceilings and posts (except siding solid wood boards and battens and hardwood plywood and plastic laminate panels) (see A14, A21, A28);
- B23 Metal astragal (unless forming an integral part of fire labelled wood doors);
- B24 Metal clad wood doors, frames, panels, or glazing of same;
- B25 Metal covering of doors, frames, windows, counter tops, and splashback (see A36);
- B26 Metal feet, metal legs, decorative legs and leveling feet and brackets made of non-wood products, or pipe hanging rods;
- B27 Metal fixtures and counter-tops or wood bases to same (see A36);

ARCHITECTURAL WOODWORK - SUPPLY

...continued

- B28 Metal inserts into doors and other architectural woodwork; metal frames to cabinets, tables and benches; metal casing, base or other metal trims; metal fastening brackets;
- B29 Metal lining or metal sash for fume cabinets, drawers, or bins. Metal drawers or metal inserts to cabinets (i.e. metal file card holders, etc.);
- B30 Metal louvres, grilles, kick-plates or thresholds;
- B31 Metal sash, frames, doors, corner posts, glass or glazing, or panels of any kind for same;
- B32 Metal screens, shades, blinds, or guards, except flyscreens to sash (see A10);
- B33 Mirrors in metal frames, or attached with rosettes or clips;
- B34 Overhead garage-type doors, or glass and hardware for same (wood frames and trim supplied knocked-down where detailed and specified as "D and Better" clear material);
- B35 Painting, priming, acid-proofing, staining, oiling, preservative treatment, or fireproofing other than pressure treating (see A1, A22, A23);
- B36 Plastic skylights or domes;
- B37 Providing space for painting contractor or others for any painting or priming of exterior or interior architectural woodwork (clear-dip preservative done by architectural woodwork when specified).
- B38 Re-additions and/or renovations to existing buildings: no material will be supplied for patching, repairing, extending or replacing existing work unless clearly specified and detailed;
- B39 Re-supply of glass, plastic, or plastic laminate, broken or damaged on the job after delivery in good order;
- B40 Sanding of standing and running trim other than drum sanding of flats;
- B41 Site measurements;
- B42 Specialty folding or sliding doors of fabric, wood and/or metal (wood bifold doors, wood frames and trim where specified and detailed to be supplied), except exterior wood sliding patio doors (see A7, A30);
- B43 Stair landings of any kind, structural or support material for same (see A9);
- B44 Structural framing material, rough bucks, cant strips, furring strips, blocking or backing;
- B45 Trade-name toilet and shower partitions;
- B46 Trade-name cooler or freezer doors (see A30);
- B47 Trade-name furniture, cabinet work, or counter tops and wood bases to same (see A27);
- B48 Trellis screening, pagodas and pergolas;
- B49 Upholstery work;
- B50 Wall mounted shelf standards, or clips and brackets to same;
- B51 Wood, fibreboard or plastic letters;
- B52 Wood and/or plastic laminated rails when they are an integral part of Entrances, Storefronts and Windows or Curtainwall;
- B53 Wood bumpers to exterior or loading bays (except clear material "D or Better" where specified);
- B54 Wood frames, outside trim to same, for vinyl, plastic and metal covered windows, except where combined in mullion, or transom frames with custom wood windows and/or glazing in wood (see A2, A3, A10).
- B55 Wall protection of plastic or non-wood materials.

ARCHITECTURAL WOODWORK - INSTALLATION

DEFINITIONS:

This tender shall be for the installation of all Interior items delivered F.O.B. truck at jobsite under the Architectural Woodwork Supply Scope and all other items from the following list which are clearly indicated to be required by the plans and specifications. Installation shall comply with the procedures set out in Section 1700 of the AWMAC Architectural Woodwork Quality Standards Manual 8th Edition.

Installation shall mean receiving, unloading, handling, uncrating and storage of Architectural Woodwork at the project site, including moving to final location, assembling, installation, correction and adjustment.

Correct humidity and temperature conditions for storage and installation of Architectural Woodwork is of primary importance and affects of humidity on wood is explained under Section 1700-G-3, 1700-G-4, and 1700-T-19 of the AWMAC Architectural Woodwork Quality Standards Manual 8th Edition.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

- C1 Caulking, other than firestopping, to Architectural Woodwork;
- C2 Cut outs for grommets, electrical and mechanical fixtures incorporated in Architectural Woodwork;
- C3 Demolition of existing installations when the materials are to be re-used or retained as specified (when specifications call for refinishing of existing installation, this contractor shall remove the items so specified and deliver to factory for refinishing);
- C4 Hoisting;
- C5 Installation of closet rods and coat hooks where attached to Architectural Woodwork (closet rods and coat hooks supplied by others);
- C6 Installation of metal grilles to Architectural Woodwork (see Mechanical Section 3, 44 Included);
- C7 Installation of wall mounted standards and brackets (supply by others);
- C8 Installation of wood siding and panelling to interior walls and ceilings;
- C9 Machining, bevelling or fitting for door hardware and the installation of the door hardware (see A30, B16). Door hardware to be supplied by others.
- C10 Cash Allowance and/or contingency funds when a specific dollar amount is listed in the architectural woodwork specifications for installation;
- C11 Protection of other trades' work from damage by this trade;
- C12 Scaffolding;
- C13 Physical measurements of dimensions required from the project site;
- C14 Supply and/or installation of materials and other work that may be assigned by pretender ruling;
- C15 Supply of nails, screws, glue and fasteners required to install Architectural Woodwork;
- C16 Testing where specifically required by the specifications;
- C17 Trade clean up;
- C18 Wood ceiling (except those which are part of suspended ceiling system) and wood light boxes;
- C19 Wood stops to glazed screens finish nailed on one side, other side tacked only;
- C20 All architectural millwork supplied with a factory finish shall have the fastening holes filled and touched up by the installer.

ARCHITECTURAL WOODWORK - INSTALLATION

.....continued

EXCLUDED:

- D1 Architectural Woodwork excluded under supply scope unless otherwise noted under Included in this scope;
- D2 Architectural Woodwork included under supply scope **EXTERIOR** (A1 to A10 inclusive);
- D3 Firestopping;
- D4 General and final clean up;
- D5 Hoarding;
- D6 Installation of metal doors and metal door frames;
- D7 Rough bucks and nailing strips concealed behind drywall;
- D8 Temporary heat, light, power and sanitation and water;
- D9 Filling of nail holes on site installed woodwork. (See Painting - Included #4)

ROOFING AND RELATED SHEET METAL

DEFINITIONS:

A **roof** is the structural top of a building or part thereof which together with the walls form a separator between the inside and outside environments of the building. Roofs in this definition are restricted to those which are horizontal or have slopes which customarily are moisture protected by items within this Trade Definition.

A **roofing system** is a structurally supported assembly of components which, when assembled on the exterior surface of a roof, provides protection for the roof and the inner face and top of adjacent parapet walls from the exterior elements. When a vapour retardant is incorporated in a roofing system it is considered as an integral part of the thermal roof insulation.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Adhesives;
2. Aggregates;
3. Asphalt and pitch emulsions;
4. Asphalt and pitch primers;
5. Asphalt base type planking;
6. Auxiliary boards, strapping, Z-bars, insulation nailing strips;
7. Bitumens;
8. Cants of roof insulation material;
9. Caulking compounds, gaskets and plastic rope;
10. Coatings;
11. Composition roofing materials;
12. Demolition of the existing roofing system when it is to be followed immediately with the installation of a new roofing system;
13. Expansion joint covers;
14. Flashing:
 - A. Metal flashing of all types of metal when they form part of the roofing system, except as noted under Excluded;

When any prefinished metal flashing of the roofing system is to colour match any prefinished metal siding, and/or metal cladding, and/or metal panelling, the sheet material for the colour matching prefinished metal flashing is to be supplied to the roofing contractor by others F.O.B. the roofing contractor's shop. The forming and installation of the colour matching prefinished metal flashing are to be included under this item;
 - B. Membrane flashing of all types of materials when they form part of and are installed in conjunction with the roofing system;
 - C. Flexible sheet membranes which form part of the building air barrier or vapour retardant and which are installed in a location that does not require another Trade to construct components over the membrane. Any membrane to be covered by material not installed by the roofing contractor is excluded from this scope. Connection to the membrane installed by other Trades prior to the roofing contractor's installation will be made by the roofing contractor provided a minimum of 200 mm of compatible material is accessible. If connection is required by any Trade following the roofing installation then the roofing contractor will provide a maximum of 200 mm, unless otherwise specified, of overlap material beyond the exterior point of the roofing system;

ROOFING AND RELATED SHEET METAL

... continued

15. Guarantee;
16. Gum pots;
17. Gutters, downspouts and metal splash pans;
18. Gypsum board when applied over a roof deck as part of the roofing system;
19. Hoisting;
20. Inspection, except when specifically allocated to others in the specifications;
21. Insulation consisting of preformed panels only. Also included is the installation of insulation for acoustical steel decks which is to be supplied by others in a preformed custom fitted condition;
22. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the built-up roofing and related sheet metal specifications;
23. Protection of other trades' work from damage by this trade;
24. Reinforcing fabrics and membranes;
25. Scaffolding;
26. Sealants and sealing compounds;
27. Shop drawings;
28. Skylights, which are thermally formed and incorporate a base frame only, smoke hatches and roof access hatches;
29. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
30. Systems of roofing including protected membrane systems, shingles, shakes and tiles. Also included are protective coatings and coverings for the insulation of protected membrane systems excluding poured-in-place light, medium or heavy concrete and paving blocks exceeding 68 kg each in mass;
31. Testing, except when specifically allocated to others in the specifications;
32. Trade clean up;
33. Vapour retardants.

EXCLUDED:

1. Flashing for roof drains and vents;
2. General and final clean up;
3. Hoarding;
4. Inspection and/or testing when specifically allocated to others in the specifications;
5. Metal roofing as described in TD-76;
6. Metal sleeves through decks for openings for vents, etc.;
7. Preformed or field cut reglets;
8. Roof drains connected to an internal system;
9. Separate curbs for skylights, hatches, etc.;
10. Structural decking (including structural stramit) and any components below the decking;
11. Temporary heat, light, power, sanitation and water;
12. Through-wall flashing;
13. Wood or metal components of the roofing system used to construct; parapets, perimeter and curb blocking, curbs, control joints and sleeper supports.

ENTRANCES, STOREFRONTS AND WINDOWS

DEFINITIONS:

This tender shall be for the supply and installation of materials and components within the fenestration, connected to, and forming an integral part of this scope, and for extruded aluminium wall cladding, aluminium laminated panels, aluminium formed sheet panels, porcelain panels and asbestos cement panels, except for infill panels forming part of other trade scopes.

Fenestration means within a floor span.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Anchoring devices:
 - (a) supply and installation of anchors which are part of the framing;
 - (b) supply only of anchors or inserts which are part of the structure;
2. Architectural glass and metal doors including sliding, swinging, revolving and balanced doors, complete with hardware (including plastic and/or plastic laminate push pulls where an integral part of the door (see architectural woodwork A10 and B52). All components for complete installation of automatic doors (including any interconnecting wiring [see Electrical 25, 26 & 27 Included] and pumps and piping), when they form an integral part and are within the fenestration of this scope;
3. Architectural metal patio or balcony doors, complete with hardware;
4. Architectural metal sills, flashing and trims forming part of entrances, storefronts and windows and other architectural metal sills, flashing and trims of matching materials (see 17 Excluded);
5. Caulking (other than firestopping), joint backing and perimeter sealing;
6. Demolition of existing installations when the materials are to be re-used or retained as specified;
7. Darkroom revolving doors of architectural metals;
8. Electrical security and monitoring devices, mounted on doors and door frames within this scope, i.e. locks, card readers, door monitors, switches, strike release, panic devices, magnets, etc., supplied and installed; wiring by electrical (see Electrical Included). Installation only of components for trade name security and monitoring systems specified to be furnished by one supplier to the electrical contractor and which must be mounted on doors and frames within this scope; supplied by the electrical contractor for installation by this contractor;
9. Extruded aluminium wall cladding (see Definitions);
10. Factory pre-assembled translucent panels;
11. Flexible sheet membrane which forms part of the building air barrier and is an integral part of the entrances, storefronts and windows system including connection to work of preceding trade where required. If connection is required by any trade following the entrances, storefronts and windows installation then the entrances, storefronts and windows contractor provides a maximum of 200 mm, unless otherwise specified, of overlap material beyond the exterior point of the entrances, storefronts and windows system;
12. Fly screens to venting windows;
13. Architectural metal framing;
14. Glass, glazing and glazing materials;

ENTRANCES, STOREFRONTS AND WINDOWS

... continued

15. Glazing and architectural metal framing that is sloped in excess of 15 degrees beyond vertical, or curved which is connected to and forming part of this scope as per definitions.
16. Guard rails including architectural metal and wood and plastic laminate where they are an integral part of, and built into metal entrances and storefronts and special windows (installation only of rails other than metal attached to special windows);
17. Hoisting;
18. Industrial steel sash;
19. Infill panels, including insulation where it forms an integral part of a panel;
20. Initial cleaning between removable/non-removable multiple glazing;
21. Insulation within the fenestration;
22. Interior architectural metal glazed partitions, including recreational arena and court glass and glazing;
23. Manufacturer's warranty only beyond the normal one year maintenance warranty;
24. Entrances and storefronts (interior or exterior);
25. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the entrances, storefronts and windows specification;
26. Preparation of framing for hardware supplied by others for doors not covered under 2 Included;
27. Protection of other trades' work from damage by this trade;
28. Scaffolding;
29. Shop drawings and engineering of entrances, storefronts and windows to the specified design criteria;
30. Single glazing, multiple glazing and sealed units, plastic, fibre glass and similar materials;
31. Spandrel and infill panels, e.g. extruded aluminium wall cladding, asbestos cement, porcelain, etc. including insulation where it forms an integral part of a panel;
32. Stiffeners and/or steel reinforcement where required and where it is enclosed by the architectural metal section (see 14 Excluded);
33. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
34. Supply only of architectural framing to be embedded in concrete;
35. Supply and installation of operating hardware;
36. Testing where specifically required by the specifications;
37. Thermally formed wall domes or pyramids which are not part of or connected to the roofing system;
38. Trade clean up;
39. Venetian blinds between glass supplied under this scope.

EXCLUDED:

1. Concrete;
2. Doors, door frames and entrances, storefronts and window frames of steel, wood, metal clad wood, plastic laminate, polyvinyl chloride and fibreglass;
3. Firestopping;
4. General and final clean up;
5. Glass, plastic or asbestos panels when supplied and installed under Architectural Woodwork (see Architectural Woodwork A13);
6. Hoarding;
7. Installation of membranes or flashing, included under this scope, which can not be installed or fastened during entrances, storefronts and windows installation;

ENTRANCES, STOREFRONTS AND WINDOWS

... continued

8. Insulation, support or furring members, within entrance and storefront systems and windows, that are normally supplied and erected by others;
9. Interior wood sills or surrounds;
10. Insulation within framing supplied and erected by others;
11. Pressed steel frames;
12. Moveable, demountable partitions;
13. Shower doors;
14. Structural steel (except as noted in 32 Included);
15. Sun control devices not between glass i.e. venetian blinds, drapes, etc.;
16. Sun screens, bird screens, guard screens;
17. Supply of flashing, sills or trim prefinished to match any materials not included in this scope (see 4 Included);
18. Supply and installation of non-rigid membrane air/vapour barriers which form part of the structure and connects to the entrances, storefronts and windows (see 11 Included);
19. Temporary heat, light, power, sanitation and water;
20. Weather louvres mechanical and architectural (see 54 Included Mechanical Section 3);

GLASS & GLAZING

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Caulking (other than firestopping), joint backing and perimeter sealing to glass and glazing;
2. Demolition of existing installations when the materials are to be re-used or retained as specified;
3. Glass doors (except in architectural woodwork) and sliding hardware, including locks, for site fabricated display cases;
4. Handcrafted leaded stained glass, glass, plastics, x-ray and asbestos infill panels to:
 - (a) Balustrades (other than escalators);
 - (b) Hollow metal;
 - (c) Metal clad wood doors;
 - (d) Metal display cases;
 - (e) Metal frames other than those falling under:
 - curtainwall scope;
 - entrances, storefronts and windows scope;
 - (f) Pressed steel (frames and applied stops to be pre-drilled, fitted and installed by supplier prior to glazing by this trade);
 - (g) Prefinished demountable partitioning;
5. Glass shelving (except in architectural woodwork) including shelf standards, clips and brackets;
6. Glass smoke baffles and sprinkler baffles including shimming, fasteners and caulking for fastening of the glass to the supporting system (supporting system supplied and installed by others);
7. Hoisting;
8. Manufacturer's warranty only beyond the normal one year maintenance warranty;
9. Mirrors, including glass, plastics, stainless steel, chrome plated in standard and tilting tamperproof frames, J moulds and clips, unless specified to be part of Architectural Woodwork (see Architectural Woodwork A16);
10. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the glass and glazing specifications;
11. Protection of other trades' work from damage by this trade;
12. Shop drawings and engineering of glass and glazing to the specified design criteria;
13. Scaffolding;
14. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
15. Trade clean up.

EXCLUDED:

1. Concrete;
2. Firestopping;
3. General and final clean up;
4. Glass to architectural woodwork;
5. Glass to overhead doors;
6. Glass to curtainwall and entrances, storefronts and windows;
7. Hoarding;
8. Mirrors, glass, polycarbonate and acrylic in wood frames or standard manufactured cabinets, display cases, furniture, fixtures, casework, countertops and tabletops;
9. Railing, capping and supports to balustrades and wall rails;
10. Recreational arena and court glass and glazing;
11. Shower doors;
12. Temporary heat, light, power, sanitation and water.

CURTAINWALL

DEFINITIONS:

This tender shall be for the supply and installation of components within the fenestration, connected to, and forming an integral part of this scope.

Curtainwall is that fenestration which continues past one or more floor spans.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Anchoring devices:
 - (a) supply and installation of anchors which are part of the grid;
 - (b) supply only of anchors or inserts which are part of the structure;
2. Architectural glass and metal doors including sliding, swinging, revolving and balanced doors, complete with hardware (including plastic and/or plastic laminate push pulls where an integral part of the door (see architectural woodwork A10 and B52), all components for complete installation of automatic doors, (including any interconnecting wiring [see Electrical 25, 26 & 27 Included] and pumps and piping) when they form an integral part and are within the fenestration of this Scope;
3. Architectural metal sills, flashing and trims forming part of the curtainwall and other architectural metal sills, flashing and trims of matching materials/finish (see 4 Excluded);
4. Caulking (other than firestopping), joint backing and perimeter sealing;
5. Demolition of existing installations when the materials are to be re-used or retained as specified;
6. Electrical security and monitoring devices, mounted on doors and door frames within this scope, i.e. locks, card readers, door monitors, switches, strike release, panic devices, magnets, etc., supplied and installed; wiring by electrical (see Electrical Included). Installation only of components for trade name security and monitoring systems specified to be furnished by one supplier to the electrical contractor and which must be mounted on doors and frames within this scope supplied by the electrical contractor for installation by this contractor;
7. Factory pre-assembled translucent panels;
8. Flexible sheet membrane which forms part of the building air barrier and is an integral part of the curtainwall system including connection to work of preceding trade where required. If connection is required by any trade following the curtainwall installation then the curtainwall contractor provides a maximum of 200 mm, unless otherwise specified, of overlap material beyond the exterior point of the curtainwall system;
9. Fly screens to venting windows;
10. Glass, glazing and glazing materials;
11. Glazing and architectural metal framing that is sloped in excess of 15 degrees beyond vertical, or curved, within the curtainwall;
12. Guard rails including architectural metal and wood and plastic laminate where they are an integral part of and built into the curtainwall (installation only of rails other than metal attached to the curtain wall);
13. Hoisting;
14. Initial cleaning between removable/non-removable multiple glazing;
15. Insulation within the curtainwall;
16. Manufacturer's warranty only beyond the normal one year maintenance warranty;
17. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the curtainwall specifications;

CURTAINWALL

... continued

18. Preparation of framing for hardware supplied by others where doors are not part of this trade;
19. Protection of other trades' work from damage by this trade;
20. Scaffolding;
21. Shop drawings and engineering of curtainwall system to the specified design criteria;
22. Skylights - glazed architectural metal framing, flat or sloped greater than 15 degrees, or curved, not attached to window framing, entrances and storefronts framing and not included under Roofing scope;
23. Spandrel and infill panels - e.g. asbestos cement, porcelain, extruded aluminium wall cladding, etc. including insulation where it forms an integral part of a panel;
24. Stiffeners and/or steel reinforcement where required and where it is enclosed by the architectural metal section;
25. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
26. Testing where specifically required by the specifications;
27. Trade clean up;
28. Venetian blinds between glass supplied under this scope.

EXCLUDED:

1. Concrete work;
2. Doors, door frames and curtainwall frames of steel, wood, metal clad wood, plastic laminate, polyvinyl chloride and fibreglass.
3. Firestopping and smoke stopping;
4. Flashing, sills or trim prefinished to match any materials not included in this scope;
5. General and final clean up;
6. Glass, plastic or asbestos panels when supplied and installed under Architectural Woodwork (see Architectural Woodwork A13);
7. Hoarding;
8. Insulation, support or furring members, within curtainwall systems, that are normally supplied and erected by others;
9. Interior wood sills or surrounds;
10. Shower doors;
11. Skylights which are thermally formed and incorporate a base frame only which relate to the roofing system;
12. Structural steel (except as noted in 24 Included);
13. Sun control devices not between glass i.e. venetian blinds, drapery, etc.;
14. Sun screens, bird screens, guard screens;
15. Temporary heat, light, power, sanitation and water.

LATH, PLASTER & STUCCO

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Acrylic plaster systems;
2. Beads, plaster stop and expansion joints, casing and trim which are an integral part of the work;
3. Building paper for lathing, plastering and stucco systems;
4. Caulking (other than firestopping) to structural, mechanical or electrical penetrations in lath and plaster or stucco systems;
5. Caulking (other than firestopping) where it forms part of the expansion or control joint;
6. Fire rating to recessed fixtures when constructed of materials within this scope;
7. Flexible sheet membrane which forms part of the building air barrier directly behind a plaster or stucco system including connection to work of preceding trade where required. If connection is required by any trade following the plaster or stucco installation then the lath, plaster and stucco contractor provides a maximum of 200 mm, unless otherwise specified, of overlap material beyond the exterior point of the plaster or stucco system;
8. Guarantee;
9. Hoisting;
10. Inserts, hangers, trim and support mouldings capable of supporting light fixtures (electrical light fixtures exceeding 610 mm x 1220 mm shall be independently supported by others);
11. Inserts, hangers, trim and support mouldings capable of supporting radiant panels and mechanical grilles (panels and grilles exceeding 610 mm x 1220 mm shall be independently supported by others);
12. Inspection;
13. Installation only of access doors;
14. Installation only of metal door frames supported by steel stud and plaster system only;
15. Installation only of pre-manufactured metal deck filler covered with plaster or stucco;
16. Installation only of plaster trims (frames) for lighting fixtures (excluding lighting fixture components);
17. Lathing systems and metal furring for plaster and stucco;
18. Lathing systems for ceramic, mosaic tile;
19. Metal channels lighter than 14 ga. for plaster systems;
20. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the lath, plaster and stucco specifications;
21. Plastering and stucco - plain, acoustical, ornamental, cast or moulded, textured plaster applied to concrete, including veneer plaster systems, veneer board and all other gypsum plaster based casts and moulded shapes;
22. Plaster sound baffles;
23. Protection of other trades' work from damage by this trade;
24. Rigid insulation when used as plaster or stucco base;
25. Scaffolding required for this trade;
26. Shop drawings;
27. Sound insulation to plaster and stucco system only (mineral wool, fibrous batt, fibre board, noise stop board, resilient sound board, gasket and caulking) all directly behind plaster and stucco only;
28. Steel stud partitions for plaster systems only, including load bearing steel studs;
29. Supply and installation of backing in steel stud partitions. All backing locations and precut wood backing supplied by others;
30. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
31. Testing of material where specified;

LATH, PLASTER & STUCCO

... continued

32. Thermal insulation (batt, rigid or loosefill attic insulation) directly behind plaster, including where walls are strapped (not to include cavity wall insulation);
33. Trade clean up;
34. Vapour barrier directly behind plaster.

EXCLUDED:

1. Building paper under finishes other than lath, plaster or stucco;
2. Corner guards or expansion joint covers which are pre-manufactured and surface mounted;
3. Exterior gypsum sheathing and metal suspension for same;
4. Firestopping (see 6 Included);
5. General and final clean up;
6. Hoarding;
7. Installation of air grilles, access panels and accessories if independently suspended;
8. Poly vapour hats (see Electrical 70 Included);
9. Steel door frames for steel stud partitions;
10. Steel studs or suspension systems when any material other than lath, plaster or stucco is applied to one or both sides;
11. Supply of access doors;
12. Supports for light fixtures and radiant panels exceeding 610 mm x 1220 mm;
13. Temporary heat, light, power, sanitation and water;
14. Thermal insulation except for batt insulation directly behind plaster system only and rigid insulation where used as a plaster or stucco base;
15. Trims and/or mouldings for radiant panels when specified to be supplied with the radiant panel (see Mechanical);
16. Wood i.e. backing, furring, etc.

DRYWALL

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

- 1 Caulking (other than firestopping) to structural, mechanical or electrical penetrations in drywall systems;
- 2 Drywall metal accessories, e.g. corner bead, casing bead, metal trim;
- 3 Exterior gypsum sheathing or rigid or semi-rigid insulation when used as a sheathing material and applied directly to the exterior surface of steel studs only;
- 4 Factory laminated vinyl gypsum board if there are no prefinished demountable partitions on the project to be tendered;
- 5 Fire rating to recessed fixtures in drywall systems;
- 6 Flexible sheet membrane which forms part of the building air barrier directly behind a drywall system including connection to work of preceding trade where required. If connection is required by any trade following the drywall installation then the drywall contractor provides a maximum of 200 mm, unless otherwise specified, of overlap material beyond the exterior point of the drywall system;
- 7 Guarantee;
- 8 Gypsum backing and/or metal suspension system where ceiling is partially or wholly covered with acoustic tile or wood or other material. Joint treatment on exposed or unexposed to be included;
- 9 Gypsum board including joint treatment where applicable;
- 10 Hoisting;
- 11 Inserts, hangers, trim and support mouldings capable of supporting light fixtures (electrical light fixtures exceeding 610 mm x 1220 mm shall be independently supported by others);
- 12 Inserts, hangers, trim and support mouldings capable of supporting radiant panels and mechanical grilles (panels and grilles exceeding 610 mm x 1220 mm shall be independently supported by others);
- 13 Inspection;
- 14 Installation only of access doors to drywall surfaces;
- 15 Installation only of drywall trims (frames) to drywall surfaces for lighting fixtures (excluding lighting fixture components);
- 16 Installation only of pre-manufactured metal deck fillers when covered with drywall;
- 17 Installation only of steel door frames supported by metal stud and drywall system;
- 18 Metal suspension system and/or metal furring capable of supporting all appurtenances supported by ceiling, for exposed drywall or spray-textured ceilings;
- 19 Cash Allowance and/or contingency funds when a specific dollar amount is listed in the drywall specifications;
- 20 Protection of other trades' work from damage by this trade;
- 21 Scaffolding;
- 22 Shop drawings;
- 23 Sound baffles made of materials described in this scope, including lead shielding;
- 24 Sound and fire insulation to drywall system only (mineral wool, ceramic, fibrous batt, fibre board, noise stop board, acoustical lead shielding, resilient sound bar, gasket and caulking) all directly behind drywall;
- 25 Sprayed drywall texture to drywall and ceiling and to concrete surfaces including the primer paint for same (see Painting 10 Excluded);
- 26 Steel studs, including load bearing studs, for all finish materials including where drywall and/or sheathing is applied to one or both sides (see 10 and 11 Excluded);
- 27 Supply and installation of backing in steel stud partitions. All backing locations and pre-cut wood backing supplied by others;

DRYWALL

... continued

28. Supply and installation of cementitious wallboard (see Tile, Terrazzo, Marble & Granite 3 Included);
29. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
30. Thermal insulation (batt, rigid or loosefill attic insulation) directly behind drywall, including where walls are strapped (not to include cavity wall insulation);
31. Trade clean up;
32. Vapour barrier directly behind drywall.

EXCLUDED:

1. Building paper;
2. Corner guards or expansion joint covers which are pre-manufactured and surface mounted;
3. Firestopping (see 5 Included);
4. General and final clean up;
5. Gypsum board or exterior gypsum sheathing when applied over a roof deck as part of the roofing system;
6. Hoarding;
7. Installation of air grilles, access panels and accessories if independently suspended;
8. Metal furring for direct attachment of metal siding;
9. Poly vapour hats (see Electrical 70 Included);
10. Steel studs for lath and plaster systems, one or both sides, and no sheathing or other materials attached (see 28 Included and Lath, Plaster and Stucco 10 Excluded);
11. Steel studs for prefinished demountable partitions;
12. Supports for light fixtures and radiant panels exceeding 610 mm x 1220 mm;
13. Temporary heat, light, power, sanitation and water;
14. Trims and/or mouldings for radiant panels when specified to be supplied with the radiant panel. (see Mechanical);
15. Wood i.e. backing, furring, etc.;
16. X-Ray protection materials.

TILE, TERRAZZO, MARBLE, & GRANITE

DEFINITIONS:

This tender shall be for the supply and installation of Tile, Terrazzo, Marble, Granite, Slate and Stone construction.

Tile is the following products provided they do not exceed 50 mm in thickness:

- (a) burned clay products, (includes pavers) either glazed or unglazed, as used in the tile industry;
- (b) composition materials, marble tiles, terrazzo tiles, glass mosaics and all substitute materials for tile made in tile-like units;
- (c) mixtures in tile-like form of cement, metals and other materials, that are made for and intended for use as a finished floor surface, stair treads, stair risers, stair base and stringer, promenade roofs, walks, walls, ceilings, swimming pools and all places where tile is used to form a finished interior or exterior surface for practical use, sanitary finish or decorative purposes (excludes resilient floor coverings, acoustic or ceiling tile).

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Application of a coat or coats of cement mortar, prepared to proper tolerance to receive tile on floors, walls and ceilings regardless of whether the cement mortar coat is wet or dry at the time the tile is applied to it;
2. Caulking (other than firestopping) between individual tiles, or marble, granite, slate or precast terrazzo panels;
3. Cementitious wallboard when used as a backing for this trade;
4. Cleaning of installed products (i.e. acid cleaning);
5. Decorative tile inserts in other materials;
6. Guarantee;
7. Hoisting;
8. Inspection;
9. Laying, cutting or setting and sealing of all tile where used for floors, bases, walls, ceilings, walks, promenade roofs, exterior veneers, stair treads, stair risers, facings, hearths, fireplaces and decorative inserts, together with any marble plinths, thresholds or window stools used in connection with any tile work;
10. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the tile, terrazzo, marble and granite specifications;
11. Protection of other trades' work from damage by this trade;
12. Scaffolding;
13. Scratch coat for ceramic tile;
14. Setting of tile by the adhesive method with organic and/or inorganic thin bed bonding materials where such bonding material is applied to the backing surface and/or the backing of tile units or sheets of tile;
15. Setting, sealing and installation of prefabricated tile systems;
16. Shop drawings;
17. SLATE, where used as above in place of tile and 50 mm thick and less;
18. STONE (Natural and Artificial), MARBLE, GRANITE, SLATE, PRECAST TERRAZZO or CULTURED MARBLE where used as a floor or wall finish, interior or exterior, same as tile and where same is 50 mm thick or under, regardless of size or shape;

TILE, TERRAZZO, MARBLE & GRANITE

... continued

19. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
20. Supply of non-slip tile nosing for poured concrete stairs;
21. Testing;
22. Trade clean up;
23. TERRAZZO where used as a finish for walls, floors, bases, curbs, stair treads, stair risers, stair base and stair stringer, which is poured in place, contains an aggregate which is to be ground. Includes rustic terrazzo - either ground or not;
24. Waterproofing material or coating when part of the backing system for installation of materials used by this trade.

EXCLUDED:

1. Caulking between materials in this scope and others, e.g. metal, glass or brick, etc.;
2. Continuous metal supporting angles, metal slots, boxes or anchorages which are built into the structural wall;
3. Expansion joints, flashing;
4. Firestopping;
5. General and final clean up;
6. Hoarding;
7. Lead pans;
8. Metal lath;
9. Miscellaneous iron work and manufactured specialty items, mat sinkage frames;
10. Temporary heat, light, power, sanitation and water;
11. Testing of pools, showers, etc.;
12. Waterproof membranes when not used in conjunction with materials used by this trade;
13. Wood grounds.

COMPONENT CEILING SYSTEMS & MANUFACTURED ACOUSTICAL UNITS

DEFINITION:

This tender shall be for the supply and installation of:

- (a) manufactured acoustical units when used for the primary purpose of acoustical sound absorption;
- (b) manufactured components that form an integral part of a suspended ceiling system installed as an interior ceiling finish and/or exterior soffit;
- (c) the same manufactured component materials as above when used as an interior wall finish and/or exterior cladding;

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Component ceiling systems consisting of one or more of the following:
 - (a) Cellulose, mineral or glass fibre acoustical tile;
 - (b) Cellulose, mineral or glass fibre acoustical ceiling lay-in panels;
 - (c) Gypsum ceiling panels (see Drywall 9 Included);
 - (d) Integrated ceiling systems:
 - i) Integrated ceiling system means a total ceiling package specified to be obtained from a single manufacturer including integral electrical, mechanical and acoustical control components attached to and forming part of the electrical and mechanical systems;
 - ii) Mechanical and electrical components shall be supplied F.O.B. jobsite by this contractor for connecting to the building systems by the respective electrical and mechanical contractors;
 - iii) This contractor shall be responsible for the completed functioning integrated ceiling system;
 - iv) Electrical fixture components including lenses when forming part of integrated ceiling systems, where fixture provides the structural element of the integrated ceiling system;
 - v) Mechanical air collars when forming part of integrated ceiling systems;
 - (e) Metal linear ceiling systems;
 - (f) Perforated or unperforated hardboard ceiling panels;
 - (g) Perforated or unperforated metal ceiling panels;
 - (h) Plastic ceiling panels (see Electrical 21 Excluded);
 - (i) Plastic and/or metal composition eggcrate ceiling panels (see Electrical 21 Excluded and A31 Architectural Woodwork);
 - (j) Preformed decorative ceilings;
 - (k) Wood linear ceiling systems;
2. Component ceiling suspension systems specifically designed for the support of component ceiling system or when used as a wall finish consisting of:
 - (a) Adhesives, staples, nails, screws, etc. for attachment of ceiling systems components and/or manufactured acoustical units;
 - (b) Carrying channels and furring channels (not exceeding 2.0 mm thick or 14 ga material) when used:
 - i) as an integral part of component ceiling systems;
 - ii) to meet U.L.C. designs;
 - iii) to support manufactured acoustical units;

COMPONENT CEILING SYSTEMS & MANUFACTURED ACOUSTICAL UNITS

... continued

- (c) Concealed and/or semi-concealed suspension systems;
 - (d) Exposed metal grid suspension systems;
 - (e) Inserts and hangers capable of supporting component ceiling systems and all superimposed loads (electrical light fixtures exceeding 610 mm x 1220 mm shall be independently supported by others);
 - (f) Inserts, hangers, trim and support mouldings capable of providing perimeter support for edge radiant heat panels when installed as an integral part of the component ceiling system, and when trim and support materials are specified to match the ceiling system;
 - (g) Integrated ceiling suspension systems including support devices for electrical and mechanical fixtures and associated accessories;
 - (h) Linear ceiling suspensions and furring systems;
 - (i) Metal and plastic mouldings required in conjunction with the direct support of the component ceiling suspension systems installed by this trade (see Electrical 21 Excluded);
 - (j) Furring required to accept materials installed by this trade;
 - (k) Sound isolation hangers which form an integral part of the hanger assembly of a component ceiling suspension system;
3. Demolition of existing installations when the materials are to be re-used or retained as specified;
 4. Fire protective boxes and/or blankets for electrical fixtures and mechanical diffusers as required in U.L.C. designs for floor/roof - ceiling assemblies;
 5. Guarantee;
 6. Hoisting and material handling;
 7. Inspection;
 8. Insulating blankets laid directly on top of ceiling suspension system installed by this trade;
 9. Luminous light and/or decorative lenses and/or louvres, including metal and/or plastic support mouldings when installed in architectural valences not constructed by this trade (see Electrical 21 & 31 Excluded);
 10. Manufactured acoustical units consisting of:
 - (a) Sound absorbing wall panels;
 - (b) Sound absorbers;
 - (c) Suspended sound baffles;
 11. Cash Allowance and/or contingency funds when a specific dollar amount is listed in specifications covering this section;
 12. Preformed architectural light coves and valances when used as a direct support or forming an integral part of a component ceiling system installed by this trade;
 13. Preformed metal break-shapes (not exceeding 2.0 mm thick or 14 ga material) when used as a direct support of or forming an integral part of a ceiling system installed by this trade;
 14. Preformed valance and curtain pockets when used as a direct support or forming an integral part of a component ceiling system installed by this trade;
 15. Protection of other trades' work from damage by this trade;
 16. Scaffolding as required by this trade;
 17. Shop drawings;
 18. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
 19. Trade clean up.

COMPONENT CEILING SYSTEMS & MANUFACTURED ACOUSTICAL UNITS

... continued

EXCLUDED:

1. Acoustical plaster ceiling finishes and suspension systems;
2. Acoustical wall treatment where constructed of materials that are not a manufactured acoustical material and recognized as an acoustically rated unit. e.g. carpet underlay, sprayed wall coatings and coverings, etc.;
3. Caulking;
4. Drywall, plaster or wood fabricated valance pockets, curtain pockets, architectural light coves and valances;
5. General and final clean up;
6. Gypsum board and/or plaster ceiling finishes and suspension systems;
7. Inserts and hanger supports for Electrical and Mechanical fixtures exceeding 610 mm x 1220 mm;
8. Trims and/or mouldings for radiant panels when specified to be supplied with the radiant panel;
9. Gypsum board backing including suspension systems;
10. Hoarding;
11. Installation of electrical fixtures when not providing the structural element of integrated ceiling systems;
12. Installation of lighting fixture lenses in integrated ceiling systems;
13. Job fabricated enclosures for acoustical batt and/or blankets;
14. Light lenses, eggcrate lenses or louvres when forming an integral part of an individual light fixture when part of electrical scope;
15. Luminous light and/or decorative lenses, including metal and/or plastic support mouldings when installed as a sign band;
16. Metal flashing when not of the same colour or material as the prefinished metal linear fascia and soffits;
17. Metal mouldings or suspension that are not an integral part of work done by this trade;
18. Non-factory applied finishes or site finishing of any work under this trade section except for touch-up;
19. Perforated or unperforated metal and/or hardboard liners, wall cladding or exterior soffits when comprised of metal siding or decking products;
20. Preparation of concrete, wood or gypsum surfaces to receive work by this trade;
21. Preparation of reflected ceiling drawings;
22. Removal of existing materials except as provided in 3 Included;
23. Sound absorption panels and/or sound dampening systems used for mechanical systems and equipment;
24. Sound attenuation barriers where used in plenum space above partitions connected and/or sealed to ceiling system or structure above;
25. Sprayed applied acoustical materials;
26. Structural components required to meet specific U.L.C. designs other than that forming an integral part of component ceiling system;
27. Supplementary safety chains and support devices as may be required for electrical, mechanical, etc. fixtures;
28. Supply, installation, connection and hook-up of electrical power services to light fixtures supplied by this contractor, including interconnecting wiring;
29. Supply, installation and connection of flexible duct and balancing of air distribution systems;
30. Supply and installation of lamps;
31. Supply and installation of linear air boots when installed into but not forming an integral part of integrated ceiling systems;
32. Temporary heat, light, power, sanitation and water;
33. Wood blocking, trims and casings for materials other than those used by this trade.

RESILIENT FLOOR COVERINGS

DEFINITION:

This tender shall be for the supply and installation of fabricated floor covering items, which before installation are resilient, i.e. flexible, and includes roll, sheet or tile-like forms made and intended for use as a floor finish.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Adhesives;
2. Cleaning and waxing as specified;
3. Coved rubber and vinyl base and accessories;
4. Guarantees;
5. Hoisting;
6. Inspection;
7. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the resilient floor coverings specifications;
8. Primers;
9. Protection of other trades' work from damage by this trade;
10. Rubber sheet risers and strings or skirting;
11. Scaffolding;
12. Sheet vinyl and linoleum (as used for floors) on counter tops, window sills and walls;
13. Shop drawings;
14. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
15. Testing;
16. Trade clean up;
17. Vinyl, rubber and linoleum sheet goods as used for floor coverings;
18. Vinyl and rubber nosing when with resilient;
19. Vinyl and rubber runners;
20. Vinyl and rubber safety and moulded stair trends;
21. Vinyl asbestos, rubber, vinyl, linoleum, cork, and vinyl cork tiles;
22. Vinyl conductive flooring.

EXCLUDED:

1. Base to demountable partitions;
2. General and final clean up;
3. Hoarding;
4. Mats;
5. Removal of existing floor coverings;
6. Resilient floor coverings to prefinished raised access flooring panels;
7. Temporary heat, light, power, sanitation and water;
8. Vented rubber base to gymnasium areas.

CARPETING

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Binder bars;
2. Carpet, including but not limited to:
 - (a) carpets for base of windows and display areas;
 - (b) carpets for ceilings;
 - (c) carpets for indoor/outdoor use;
 - (d) carpets for tacked installation;
 - (e) carpets for tackless installation;
 - (f) carpets for wall installation;
 - (g) carpet tiles for floors, walls and ceilings;
3. Carpet base and base cap excluding metal capping, incorporated in wall structure;
4. Carpet underlay or cushion;
5. Guarantee;
6. Hoisting;
7. Initial cleaning after installation;
8. Inspection;
9. Mats and runners of carpet material;
10. Nosing, other than wood or metal;
11. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the carpeting specifications;
12. Primers and adhesives with application;
13. Protection of other trades' work from damage by this trade;
14. Reducing strips;
15. Scaffolding;
16. Seaming diagram;
17. Shop drawings;
18. Supply and/or installation of materials and other work that may be assigned by pretender riding;
19. Testing;
20. Trade clean up.

EXCLUDED:

1. General and final clean up;
2. Hoarding;
3. Removal of existing floor coverings;
4. Temporary heat, light, power, sanitation and water.

SEAMLESS FLOORING

DEFINITION:

This tender shall be for the supply and installation of flake, granular, rubber and synthetic fillers, natural aggregates and compositions when used with polyurethane, epoxy, poly-acrylate, natural or synthetic binders or other products approved as an equal or alternate by the architect. The finished surface to remain un-ground.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Guarantee;
2. Hoisting;
3. Inspection;
4. Manufactured accessories, i.e. rubber, vinyl, wood, stair treads, metal nosing, stringers and risers, as required for seamless flooring application only;
5. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the seamless flooring specification;
6. Protection of other trades' work from damage by this trade;
7. Scaffolding;
8. Seamless flooring material when it is applied to:
 - (a) Bases;
 - (b) Curbs and gutters;
 - (c) Floors;
 - (d) Treads, risers, stair base and stringers;
 - (e) Walls;
9. Shop drawings;
10. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
11. Temporary ventilation during application;
12. Testing;
13. Trade clean up;
14. Waterproof membranes and levelling coats when used as part of seamless flooring system.

EXCLUDED:

1. Finishing of surfaces to receive seamless flooring;
2. General and final clean up;
3. Hoarding;
4. Seamless flooring to prefinished raised access flooring panels;
5. Temporary heat, light, power, sanitation and water.

SPECIAL WALL COATINGS

DEFINITION:

This tender shall be for the supply and installation of Permanent Type Coating Systems having the following distinguishing characteristics:

- (a) applied only by factory trained franchised applicators; and
- (b) multi-coat system producing a finished dry film thickness of not less than 250 um with or without obtaining special decorative features by incorporating rock aggregate, marble chips, coloured ceramic granules, sound absorbing particles, reinforcing fibreglass, etc.; and
- (c) Test results have been published in reference to the following: incombustibility, chemical resistance, exceptional durability eliminating deterioration due to oxidation, moisture, and ultra violet exposure, abrasion resistance, elasticity, etc.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Coatings:
 - (a) Clear, natural and pigmented sealants - where supplied only by franchise manufacturers;
 - (b) Cementitious coatings where supplied only by franchise manufacturers;
 - (c) Epoxies - 2 components, catalyst cured, minimum of 250 um dry film thickness exclusive of filler coats;
 - (d) Exposed aggregate coatings;
 - (e) Neoprene - hypalon;
 - (f) Textured coatings - using polyurethane, rubber vinyl acoustical particles;
 - (g) Vinyl acrylics - interior, exterior, textured;
 - (h) Vinyl;
2. Guarantee;
3. Hoisting;
4. Inspection;
5. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the special wall coatings specifications;
6. Protection of other trades' work from damage by this trade;
7. Scaffolding;
8. Shop drawings;
9. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
10. Temporary ventilation during application of product;
11. Trade clean up.

EXCLUDED:

1. General and final clean up;
2. Hoarding;
3. Paint products generally sold over the counter and applied by the purchaser;
4. Temporary heat, light, power, sanitation and water.

SPRAY APPLIED FIREPROOFING

DEFINITIONS:

This tender shall be for the supply and installation of spray applied fireproofing including all components necessary for a complete installation;

Spray applied fireproofing may comprise various products performing the function of providing a fire resistant surface as an integral part of an overall construction assembly. The governing factor and criteria are the Classification of Assemblies based on Fire Resistance Tests performed by ULC and Underwriters Laboratories Inc.;

Spray fireproofing is normally applied by a franchised applicator appointed by the manufacturer;

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Fibrous fireproofing, cementitious fireproofing, surface sealers, primers and paints as recommended by the manufacturer;
2. Guarantee as per manufacturer's warranty. Extended warranty when required by performance specifications;
3. Hoisting;
4. Inspection;
5. Materials performing a dual function of providing spray fireproofing and spray insulation when specified under spray applied fireproofing;
6. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the spray applied fireproofing specifications;
7. Protection of other trades' work from damage by this trade;
8. Scaffolding;
9. Special ventilation when required during application;
10. Surface treatment;
11. Supply and/or installation of materials and other work that may be assigned by pretender riding;
12. Trade clean up.

EXCLUDED:

1. Drywall fireproofing;
2. Firestopping;
3. General and final clean up;
4. Hoarding;
5. Plaster and stucco fireproofing;
6. Sprayed soundproofing and sprayed air seal including spray applied fire retardant to same;
7. Temporary heat, light, power, sanitation and water;
8. Vermiculite, vermiculite concrete.

FIRESTOPPING

DEFINITIONS:

This tender shall be for the supply and installation of materials and components, including incidental items required for a complete installation, for the sealing, with firestopping materials, of penetrations through, and junctions between, fire-rated walls, floors, ceilings and roof structure.

Firestopping materials shall be those that will remain in place and prevent the passage of flame or hot gasses when subject to the standard fire exposure in ULC-S115, "Standard Methods of Fire Endurance Test of Building Construction Materials", for a period of time equal to the fire protection rating required for the specified grade of fire separation.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Forms or damming;
2. Guarantee or warranty when required by performance specifications;
3. Hoisting;
4. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the firestopping specifications;
5. Primers;
6. Protection of other trades' work from damage by this trade;
7. Scaffolding;
8. Shop drawings;
9. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
10. Testing when specified to be part of this subcontract;
11. Trade clean up.

EXCLUDED.

1. Backing, supports and finishes for other trades;
2. Caulking (other than firestopping);
3. Centering or alignment of pipes, conduit or devices passing through a penetration;
4. Fire rating to recessed fixtures in drywall systems (see Drywall 5 Included);
5. Fire rating to recessed fixtures in lath, plaster and stucco systems (see Lath, Plaster and Stucco 6 Included);
6. Fireproofing;
7. General and final clean up;
8. Hoarding;
9. Temporary, heat, light, power, sanitation and water.

PAINTING

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Application and/or removal of protective and/or decorative coatings except those covered under special wall coatings;
2. Application of Coatings of:
 - (a) Bitumens applied as paints;
 - (b) Emulsions;
 - (c) Fibreglass;
 - (d) Hypalon;
 - (e) Lacquers;
 - (f) Mastic;
 - (g) Paints;
 - (h) Plastics;
 - (i) Stains;
 - (j) Varnishes;
3. Application, using pastes or adhesives, of:
 - (a) Burlap;
 - (b) Cambric-backed wood veneers;
 - (c) Cottons;
 - (d) Damasks;
 - (e) Grass cloth;
 - (f) Muslin;
 - (g) Paper;
 - (h) Paper backed metal foils;
 - (i) Rubber sheeting for tank linings;
 - (j) Vinyl wall fabrics;
4. Filling of nail holes, on-site only, in Architectural Woodwork (see 4 Excluded and Architectural Woodwork Definitions);
5. Fire-retardant paint and clear coating to architectural woodwork and wood panelling, excluding pressure treated items;
6. Guarantee;
7. Hoisting;
8. Inspection;
9. Miscellaneous Applications of:
 - (a) Gold leaf;
 - (b) Metallizing;
 - (c) Silver leaf;
10. On-site mechanical and electrical painting, including primary colour coding of all pipes, ducts and equipment. Mechanical or electrical contractor to identify where required;
11. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the painting specifications;
12. Painting of recreational lines and markings on resilient floor coverings;
13. Protection of other trades' work from damage by this trade;
14. Scaffolding;
15. Shop drawings;
16. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
17. Trade clean up.

EXCLUDED:

1. Clear finishes or hardeners to concrete floors;
2. Clear finishes to exterior masonry (see Masonry 12 Included);
3. Coatings specified under special wall coatings;
4. Filling of nail holes in Architectural Woodwork specified to be shop applied finished;
5. General and final clean up;
6. Hoarding;
7. Mechanical and electrical stencilling, plastic decals for flow arrows, identification, plastic and/or canvass, coloured tape and/or secondary banding;

PAINING

... continued

8. Painting of recreational lines and markings and finishes on hardwood floors;
9. Painting to temporary hoardings or dust walls;
10. Primer paint and priming for sprayed drywall texture to drywall, ceiling and concrete surfaces (see Drywall 25 Included);
11. Priming to miscellaneous metals and structural steel as defined in miscellaneous steel, structural steel and mechanical scopes;
12. Shop applied finishes to architectural woodwork (see Architectural Woodwork A23);
13. Temporary heat, light, power, sanitation and water.

PREFINISHED DEMOUNTABLE PARTITIONING

DEFINITIONS:

Prefinished means exposed components do not require jobsite finishing.

Demountable means readily dismantled and re-erected using same component parts.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Chalkboard, tackboard and display board which are incorporated in the prefinished demountable partition system;
2. Components and accessories for prefinished demountable partitions including aluminium, plastic and metal frames, battens, bases, ceiling moulds, etc.;
3. a) Factory applied vinyl covered board, except where used in panels on T-bar ceiling systems, will be supplied and installed by the prefinished demountable partition contractor when prefinished demountable partitions are specified on a project;
b) Factory applied vinyl covered board, except where used in panels on T-bar ceiling systems, will be supplied and installed by the drywall contractor when prefinished demountable partitions are not specified on a project;
4. Guarantee;
5. Hoisting;
6. Hollow metal door and window frames for use in prefinished demountable partitions shall be supplied, installed and finished by the demountable partition contractor;
7. Cash Allowance and/or contingency funds when a specific dollar amount is listed in prefinished demountable partitions specifications;
8. Prefinished surfaces which form part of the prefinished demountable system;
9. Protection of other trades' work from damage by this trade;
10. Scaffolding;
11. Shop drawings;
12. Sound insulations and internal linings for prefinished demountable partitions;
13. Steel studding, steel furring, etc. for prefinished demountable partitions;
14. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
15. Trade clean up.

EXCLUDED:

1. Backing and supports for other trades;
2. Folding partitions, operable walls and moveable acoustical screens;
3. General and final clean up;
4. Gypsum board application requiring taping and filling on the jobsite;
5. Supply and installation of glass and glazing;
6. Supply and installation of wood frames, doors, hardware, etc.;
7. Temporary heat, light, power and sanitation and water.

RAISED ACCESS FLOORING

DEFINITION:

This tender is for the supply and installation of manufactured raised access floor systems and related accessories.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Access floor panels either prefinished or unfinished, constructed of one or more of the following:
 - (a) Light weight concrete;
 - (b) Steel clad wood core;
 - (c) Welded metal/aluminum;
 - (d) Prefinished floor finishes when incorporated as integral part of the access floor panel:
 - (i) Carpet;
 - (ii) High pressure plastic laminate;
 - (iii) Resilient floor coverings;
 - (iv) Other;
2. Access floor substructure consisting of:
 - (a) Adhesives, screws, bolts and anchors;
 - (b) Pedestal base plates;
 - (c) Pedestal heads;
 - (d) Sound deadening pads and/or covers;
 - (e) Stringers.
3. Accessories (pre-manufactured only):
 - (a) Electrical service centres (packaged equipment) when incorporated into floor panels;
 - (b) Fascia trims;
 - (c) Gaskets;
 - (d) Grilles that are part of the integrated floor system;
 - (e) Grommets;
 - (f) Handrails;
 - (g) Metal and rubber nosing;
 - (h) Panel lifting devices;
 - (i) Panel trims and mouldings;
 - (j) Perforated dampered or undampered access floor panels when specified;
 - (k) Ramps complete with rubber mats and runners;
 - (l) Steps complete with floor finish;
 - (m) Under floor baffles and/or plenum dividers;
4. Cleaning and final preparation of prefinished panels as specified;
5. Cutting of panels for electrical and mechanical services and equipment when indicated on drawings;
6. Guarantee;
7. Hoisting and material handling;
8. Inspection;
9. Maintenance material;
10. Metal and/or wood shims;
11. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the access flooring specifications;
12. Protection of finished surfaces;
13. Protection of other trades' work from damage by this trade;

RAISED ACCESS FLOORING

... continued

14. Shop drawings and/or panels and supports layout drawings;
15. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
16. Testing;
17. Trade clean up;
18. Under-floor cross bridging when specified;

EXCLUDED:

1. Baseboards:
 - a) Carpet base and mouldings (unless material finish of access floor)(see Carpeting);
 - b) Prefinished extruded vinyl plastic (see Prefinished Demountable Partitioning);
 - c) Rubber and vinyl baseboard (see Resilient Floor Coverings);
2. Caulking;
3. Connection of building ground (see Electrical 41 Included);
4. Electrical connection of service centres;
5. Final cleaning;
6. Floor finishes when jobsite applied over access floor panels, e.g. carpet, tile;
7. General and final clean up;
8. Hoarding;
9. Ledger angles and anchors set into concrete;
10. Mechanical grilles which are not a part of the integrated floor system;
11. Preparation of access floor panels to receive jobsite applied floor coverings;
12. Temporary heat, light, power, sanitation and water;
13. Under-floor subfloor preparation;
14. Wood blocking, trims and casings for materials other than those used by this trade.

DUMBWAITERS

DEFINITION:

This tender shall be for supply and installation of dumbwaiters and all components necessary for a complete installation.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Electrical wiring and conduit from all controllers to signals and operating circuits;
2. Guarantee;
3. Hoisting;
4. Inspection;
5. Licenses;
6. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the dumbwaiters specifications;
7. Protection of other trades' work from damage by this trade;
8. Scaffolding;
9. Shop drawings;
10. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
11. Trade clean up.

EXCLUDED:

1. General and final clean up;
2. Hoarding;
3. Providing feeder wires to controllers;
4. Temporary heat, light, power, sanitation and water.

ELEVATORS

DEFINITION:

This tender shall be for supply and installation of elevators and all components necessary for a complete installation.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Door operating equipment;
2. Drilling and casing plunger hole for hydraulic elevators;
3. Electric elevators;
4. Electrical wiring and conduit from all controllers to signals and operating circuits;
5. Elevator doors and sills;
6. Elevator entrances (except freight elevator entrance frames);
7. Guarantee;
8. Hoisting;
9. Hydraulic elevators;
10. Inspection;
11. Licenses;
12. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the elevators specifications;
13. Parking garage hoists;
14. Piping incidental to hydraulic elevators;
15. Protection of other trades' work from damage by this trade;
16. Scaffolding;
17. Shop drawings;
18. Speed-ramps;
19. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
20. Supply and installation of temporary hoisting beams required for use of elevator installer only;
21. Trade clean up.

EXCLUDED:

1. General and final clean up;
2. Hoarding;
3. Hoisting and divider beams;
4. Providing feeder wires to controllers;
5. Providing the hoistway structure including supports for both guide rails and machine beams;
6. Providing the pit and machine room;
7. Providing ventilation of pit, hoistway and machine room;
8. Temporary heat, light, power, sanitation and water.

MOVING WALKWAYS

DEFINITION:

This tender shall be for supply and installation of moving walkways and all components necessary for a complete installation.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Electrical wiring and conduit from all controllers;
2. Guarantee;
3. Hoisting;
4. Inspection;
5. Licenses;
6. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the moving walkways specifications;
7. Protection of other trades' work from damage by this trade;
8. Scaffolding;
9. Shop drawings;
10. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
11. Trade clean up.

EXCLUDED:

1. General and final clean up;
2. Hoarding;
3. Providing feeder wires to controllers;
4. Temporary heat, light, power, sanitation and water.

ESCALATORS

DEFINITION:

This tender shall be for supply and installation of escalators and all components necessary for a complete installation.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Electrical wiring and conduit from all controllers to signals and operating circuits;
2. Guarantee;
3. Hoisting;
4. Inspection;
5. Licenses;
6. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the escalators specifications;
7. Protection of other trades' work from damage by this trade;
8. Scaffolding;
9. Shop drawings;
10. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
11. Trade clean up;

EXCLUDED:

1. General and final clean up;
2. Hoarding;
3. Providing feeder wires to controllers;
4. Temporary heat, light, power, sanitation and water.

MECHANICAL

The format under this Trade Definition is based on the premise that the mechanical tender normally includes the basic categories of plumbing, heating, ventilation and sheet metal, refrigeration, HVAC controls, sprinklers, insulation and incinerators and all items commonly associated with the above categories which are normally laid out in the drawings and specifications. The purpose of this definition is to identify, which of the subcontractors in the mechanical division are responsible for each sub-division of the work and it does not limit or restrict the work as defined within the specifications.

DEFINITIONS:

This Trade Definition consists of seven sections, as follows:

- SECTION 1. Items common to more than one section of the Mechanical Division;
- SECTION 2. Items specific to the Prime Mechanical contractor;
- SECTION 3. Items specific to the Ventilation and Sheet Metal subtrade contractor;
- SECTION 4. Items specific to the HVAC Controls subtrade contractor;
- SECTION 5. Items specific to the Refrigeration subtrade contractor;
- SECTION 6. Items specific to the Insulation subtrade contractor, and
- SECTION 7. Items specific to the Sprinkler subtrade contractor.

EACH TENDER IN THIS CATEGORY SHALL INCLUDE AND EXCLUDE APPLICABLE ITEMS, UNLESS OTHERWISE NOTED WITHIN THE DEFINITION, FROM SECTION 1 PLUS ALL OTHER ITEMS FROM THE SPECIFIC SECTION FOR WHICH THE SUB-BID OR SUB-SUB BID APPLIES.

Packaged equipment, so specified under the mechanical scopes, shall mean pre-wired equipment supplied in a completely electrically operable state after one final connection of power wiring, and remote control connections if specified.

SECTION 1 GENERAL MECHANICAL ITEMS

The following items and requirements are common to more than one section of the Mechanical Division and, wherever applicable, shall be included or excluded, unless specifically noted in this trade definition, by the Prime Mechanical subcontractor and each of the sub-subtrade contractors submitting bids to the Prime Mechanical subcontractor:

INCLUDED:

1. Access panels, supply only, to provide access for servicing mechanical systems/components supplied under this Scope;
2. Alignment and grouting for mechanical equipment;
3. Anchor bolts, bases and supports made of steel for mechanical equipment;
4. Catwalks, ladders and gratings supporting and/or servicing equipment, where shown on mechanical drawings only;
5. Commissioning of mechanical systems specific to the trade or subtrade;
6. Demolition of existing installations when the materials are to be re-used or retained as specified;
 - a) Exterior excavation including cutting of existing surface materials as required, shoring, pumping, bedding and the first 300 mm of protective cover. Backfill, tamping and disposal of surplus excavated material by others (see Section 2, 3 Excluded).
 - b) Interior excavation including shoring, pumping, bedding and first 300 mm of protective cover. Backfill, tamping and disposal of surplus excavated material by others (see Section 2, 3 Excluded).
7. Hoisting;

SECTION 1

... continued

8. Identification and labelling, other than painted, including plastic decals for arrow flow, plastic and/or canvas, coloured tape and/or secondary colour banding (see 11 Excluded);
9. Manufacturer's warranty only beyond the normal one year warranty period;
10. Operation and maintenance manuals and as-built and/or record drawings. Subtrade contractors are responsible to provide such items specific to their work, of such quality and quantity as may be specified, to the Prime Mechanical contractor who shall be responsible for tabulating, binding, coordinating and final submission of such documentation, including transfer drafting and final as-built mylar/sepia where specified;
11. Permits, licenses and inspections as required for work under this Scope;
12. Priming to catwalks, ladders, gratings, steel supports, hangers and other miscellaneous support steel supplied under this Scope (See Painting 10 Excluded);
13. Protection of other trades' work from damage by this trade;
14. Roughing-in and connecting, only as shown on the tender documents, specialty items, cabinets or equipment supplied and installed by others;
15. Scaffolding;
16. Shop drawings;
17. Sleeving, except under Section 6;
18. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
19. Trade clean up;
20. Trims and/or mouldings for radiant panels when specified to be supplied with the radiant panel.
21. Variable speed controllers including those which are mechanically or hydraulically initiated and operated and those which are electrical when specified as part of packaged equipment;
22. Vibration isolation for equipment supplied under this Scope including steel and metal frames for equipment bases. (Prime Mechanical contractor shall include isolation for HVAC Controls air compressors).

EXCLUDED:

1. Alterations of services, as specified in the tender documents, required for specialty items, cabinets or equipment not supplied under this subcontract;
2. Backing and backing materials, supply and installation;
3. Back-plastering for fire protection;
4. Building permits;
5. Catwalks, ladders, gratings and supports where detailed on architectural or structural drawings (see 4 Included);
6. Cutting, coring and patching - when pertaining to renovations, alterations or additions;
7. Electrical:
 - (a) motor starters, multi-speed and protection switches, including variable speed drives which are electrically initiated or operated, without exception other than that equipment which forms an integral part of packaged equipment requiring one power connection only;
 - (b) electrical wiring for controls which directly switch the power line to motors and duct heaters ("directly" means not through the magnetic coil (See Electrical control wiring and power wiring);
8. Frost boxes;
9. General and final clean up;
10. Hoarding;
11. Painting (on-site) (see Painting 10 Included);
12. Poured-in-place concrete;
13. Security (off-hours);
14. Temporary heat, light, power, sanitation, water and ventilation;
15. Variable speed drives which are electrically initiated or operated unless specified to be part of packaged equipment;
16. Waterproofing, firestopping and/or sound proofing to wall, floor and ceiling penetrations.

SECTION 2 PRIME MECHANICAL

INCLUDED:

1. Air compressors (except as noted in glass trades scopes for automatic doors and Instrumentation 1 Included), vacuum pumps, piping, regulators and accessories. Also oxygen and acetylene systems and accessories;
2. Counter tops with integral sink or basin, including counter-tops, splash-backs and fascia of the same material connected thereto (see B7 Architectural Woodwork);
3. Distribution and installation of thermowells, control valves, remotely controlled sluice gates, orifice plates and primary measuring elements as related to instrumentation (see Instrumentation 6 Excluded);
4. Drip pans under mechanical piping;
5. Drymop, wetmop and vacuum systems (see Electrical 74 Included);
6. Electric boilers;
7. Emergency Generators:
 - (a) Piping for fuel, coolants and exhaust for generator prime movers. Flex connections, radiator, and muffler to be supplied with units (see Electrical 71 Included);
 - (b) Fuel tanks for power plant equipment complete with dispensing units and piping (see Electrical 71 Included);
 - (c) For remote radiators only, piping and associated equipment including valves, pumps, expansion tanks and coolant;
8. Fire Standpipe System: Stand alone type when not connected to a combination sprinkler/standpipe system fire pump, and including:
 - (a) Fire pumps, control panels, motors, engine and fuel system, fire hose cabinets, fire extinguishers and fire extinguisher cabinets, excluding wiring and connections (see Electrical 37 included);
 - (b) Carbon dioxide, dry chemical and halon systems including piping, outlets, associated detectors and control panels, including integrated kitchen equipment fire protection systems, excluding wiring and connections (see Electrical 37 Included);
9. Flashing for drains and plumbing vents;
10. Frames and covers made of cast iron for catch basins and/or manholes. Trade name gratings, regardless of material. Sump frames and covers and/or non-ferrous items not covered in miscellaneous steel (see Miscellaneous Steel 18 Included);
11. Gas vent grilles;
12. Grilles for top outlet and bottom inlet for wall fin radiation, induction units and cabinet heaters when installed in architectural cabinets including extension collars (architectural cabinets supplied and installed by others);
13. Hospital and hydro-therapy equipment that is connected to water and/or waste;
14. Humidifiers except in furnace;
15. Incinerators c/w burners and draft inducers. Breeching, stack and refractory lined chimneys c/w counter flashing, storm collars, wall brackets and supports;
16. Induction units;
17. Laboratory sinks, faucets, gas outlets and factory-built fume hoods and/or cabinets, complete with all components, except when an integral part of casework;
18. Lubrication equipment, fuel and oil storage tanks complete with dispensing units and piping;
19. Medical gas systems, piping and equipment;
20. Operational gas tests;
21. Packaged self-contained air cooled water chillers including start-up when no field installed inter-connecting refrigeration piping required for these chillers;
22. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the mechanical specifications (Prime Mechanical contractor to include Cash Allowance and/or contingency funds for mechanical subtrade contractors);

SECTION 2

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23. Piping and connections to automotive hoists (hoists supplied and installed by others);
24. Pneumatic tube systems and related controls;
25. Radiant water or liquid heating panels;
26. Self-contained control valves:
 - (a) differential pressure;
 - (b) domestic hot water;
 - (c) pressure;
 - (d) Temperature (including radiator valves);
27. Services and service charges: notwithstanding that all services and service charges for gas, water and sewer as levied by the town, city or utility company may be known at the time of submitting this bid, if the Consultant has issued an addendum, in accordance with the regulations of ACTS providing for a Cash Allowance for said services, this contractor shall include that amount and indicate so on the bid (see applicable regulation under Part 4, "Notwithstanding and Pretender Conditions and Special Addenda");
28. Sewage Disposal:
 - (a) prefabricated septic tanks and supply and install fittings and piping for those poured-in-place;
 - (b) Leeching lines for sewage disposal systems (including backfill of gravel, straw and loam to provide a complete installation for field to finish grade);
29. Shower cabinets, complete with manufactured receptors, doors or curtains and rods;
30. Site services including: sanitary and storm sewers (except culverts for yard drainage), precast and masonry catch basins and manholes, water services and fire hydrants;
31. Soap dispensing systems complete with piping and tanks;
32. Solar water or liquid heating systems (see Electrical 100 Included);
33. Steam cleaners/steam jenny permanently connected to water or waste;
34. Steel chimneys or breeching heavier than 10 ga., when not refractory lined;
35. Supply and installation of companion flanges for orifice plates (see Instrumentation 13 Excluded);
36. Supply and installation of supports for radiant panels exceeding 610 mm x 1220 mm;
37. Swimming pool mechanical equipment, including supply and drain piping, except when packaged pool is specified;
38. Thermostats not directly involving HVAC control systems;
39. Water service for external irrigation systems, suitably sized, to exterior of building including such back-flow prevention devices, metres or other equipment as necessary to comply with all government codes and regulations (see Exterior Landscaping 2 Included);
40. Weeping tile for sewage disposal systems only;
41. Work/materials/equipment included under Mechanical - Section 1.

EXCLUDED:

1. Clean-outs or clean-out access for building weeping tile systems;
2. Cutting in and installation of door grilles;
3. Excavating and backfilling for underground tanks or dry well pits (see Section 1, 7 Included);
4. Instrumentation where not related to HVAC controls;
5. Supply and installation of automotive hoists;
6. Trims or mouldings for radiant panels, except when supplied with the radiant panel;
7. Underground sprinkler and/or irrigation systems (see Exterior Landscaping 2 Included);
8. Vapour barrier and insulation not applied to Mechanical system;
9. Washroom accessories;
10. Work/materials/equipment excluded under Mechanical - Section 1.

SECTION 3 VENTILATION AND SHEET METAL

INCLUDED:

1. Air curtains except gas or oil fired units, where no duct connections are required;
2. Air duct silencers;
3. Air filters:
 - (a) Charcoal and odour filters;
 - (b) Dry-pak filters;
 - (c) Electronic/electrostatic filters;
 - (d) Filter gauges;
 - (e) Flat permanent type;
 - (f) Grease filters (when canopy supplied by this contractor);
 - (g) Roll type filters;
 - (h) Throw-away type,Except for packaged air handling units that include filter sections
4. Air mixing baffles and air blenders;
5. Air terminal boxes complete with electric, electronic or pneumatic actuators, controllers and integral fan section, electric or water coils;
6. Air troffer boots;
7. Airflow measuring devices (self contained) when used for measuring only and not interfaced with any other system or device;
8. Attenuator boxes, tabulators and pressure reducing valves for air supply;
9. Back-draft and barometric dampers, self acting;
10. Balancing of air system including sound measurement pertaining to air systems;
11. Breeching and/or chimneys, sealed or otherwise, 3.5 mm (10 gauge) or lighter, Types A, B and C, not refractory lined;
12. Canopies and hoods, domestic range hoods, ducted and non-ducted, except where called for under kitchen equipment;
13. Carbon monoxide exhaust systems complete with associated equipment and accessories, excluding monitors;
14. Combination fire/smoke dampers; including electric, electronic or pneumatic actuators and end switches;
15. Counter flashing for all exterior refrigeration units;
16. Counter flashing that pertain to this scope;
17. Direct-fired make-up air units except where no duct connections are required;
18. Drain pans for equipment under the mechanical scope (not packaged units);
19. Duct cleaning;
20. Duct furnaces;
21. Duct insulation, internal only (see 1 Excluded);
22. Dust or material collector systems complete with associated equipment and accessories, when air handling;
23. Electric duct mounted coils and electric heaters requiring duct connections;
24. Electric motor operated back draft dampers only when specified as part of an exhaust fan and/or roof hood;
25. Factory built solid fuel burning fireplaces and associated metal flues;
26. Fans:
 - (a) booster fans,
 - (b) exhaust air fans;
 - (c) exhaust fans which are remote from factory built fume hoods or fume cabinets;

SECTION 3

... continued

- (d) return air fans;
 - (e) stratification elimination fans;
 - (f) supply air fans;
- except for packaged units with integral water, steam or glycol coils, where fan is not separated by ductwork or flexible connection;
- 27. Fire dampers and fire stop flaps;
 - 28. Flexible type air ducts;
 - 29. Garbage and linen chutes of metal construction;
 - 30. Gas fired unit heaters and furnaces requiring duct connections;
 - 31. Gauges (self contained) which indicate system air flow and/or pressure and do not interface with controls system;
 - 32. Gravity relief vents and intakes;
 - 33. Humidifiers when used in conjunction with furnaces;
 - 34. Indirect fired self-contained heating and/or cooling units, including de-humidifiers, except where no duct connections are required;
 - 35. Induced draft fans, except when in conjunction with incinerators and/or except when an integral part of a heating boiler;
 - 36. Isolation for ventilation equipment;
 - 37. Integrated ceiling system components as follows:
 - (a) Linear air boots when installed into but not forming an integral part of the ceiling system;
 - (b) Supply, installation and connection of flexible duct;
 - 38. Manual smoke dampers;
 - 39. Manually operated balancing dampers;
 - 40. Motorized dampers; distribution and installation only;
 - 41. Paint spray booths;
 - 42. Plenums and casings except concrete, masonry and drywall construction shafts or tunnels in which case only an internal metal liner and/or internal insulation, if specified, will be provided;
 - 43. PVC/plastic combustion air and flue venting;
 - 44. Registers, grilles, diffusers and supply only of door grilles;
 - 45. Scrubbers and odour/gas absorber units. (Dry type requiring only drain connections);
 - 46. Self-contained duct-mounted heat reclaiming units requiring no other connections;
 - 47. Self-contained gas-fired classroom heating and ventilating units complete with all shelving, counters and accessories;
 - 48. Sheet metal and non-metallic air handling ductwork including hangers and supports except concrete, masonry and drywall construction shafts or tunnels in which case only an internal metal liner and/or internal insulation, if specified, will be provided;
 - 49. Spray eliminators in built-up plenums;
 - 50. Thermometers (self contained) which indicate system air temperatures, and do not interface with controls system;
 - 51. VAV box operators, controllers pneumatic;
 - 52. Ventilation and exhaust ducting for emergency generators;
 - 53. Weather louvres (mechanical and matching architectural) complete with bird screen, related sheet metal blank-off panels and filler pieces, except for louvres of cladding materials having the same finish as the wall cladding system, and forming an integral part thereof;

SECTION 3

... continued

54. Welded sheet metal kitchen exhaust duct including the supply and installation of associated high temperature insulation and metal liner to protect combustible materials;
55. Welding fume extraction systems complete with central blower/turbine dust collection unit c/w PVC ducting and related accessories;
56. Work/materials/equipment included under Mechanical - Section 1.

EXCLUDED:

1. External insulation of concrete, masonry and drywall shafts, tunnels or plenums;
2. Mud grilles, foot grilles, pedigrid grilles including those used in conjunction with ventilation systems;
3. Indirect fired, self-contained heating and/or cooling units, including dehumidifiers, except where duct connections are required;
4. Ventilation grilles, caps and/or louvres for: (a) attic, (b) soffit or (c) crawl spaces (see 53 Included);
5. Work/materials/equipment excluded under Mechanical - Section 1;
6. Electric Heating, except where duct connections are required;

The following items **Excluded** from this subtrade tender will be **Included** by the Prime Mechanical contractor:

7. Air washers,
8. Coil supports and hangers;
9. Drip pans under mechanical piping;
10. Drymop, wetmop and vacuum systems;
11. Fume cabinets;
12. Gas fired unit heaters and furnaces not requiring duct connections;
13. Gas vent grilles;
14. Gas, water and rain connections;
15. Gauges indicating Air Flow and/or Pressure and Thermometers for Packaged Air Handling Units supplied by the Prime Mechanical Contractor;
16. Operational gas tests;
17. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the Ventilation and Sheet Metal specifications;
18. Spray eliminator units in packaged units only;
19. Steam grid humidifiers;
20. Vitrified pipe except when used in conjunction with air collection systems.

SECTION 4 HVAC CONTROLS

DEFINITION:

HVAC Controls means controls for equipment that affects temperature and humidity within a building provided that the controls do not directly switch the power lines to the motors and duct heaters, in which case the wiring of such controls be the responsibility of the electrical contractor.

INCLUDED:

1. Environmental Control:
 - 1.1 Air conditioning controls (manual and automatic);
 - 1.2 Boiler controls (not specified as part of pre-wired package boilers);
 - 1.3 Control compressor c/w accessories;
 - 1.4 Cooling controls (manual and automatic);
 - 1.5 Heating controls (manual and automatic);
 - 1.6 Humidification controls (manual and automatic);
 - 1.7 Motorized dampers - supplied to mechanical contractor on jobsite for unloading, distribution and installation by others;
 - 1.8 Refrigeration controls (manual and automatic) and inter-locking wiring between the chiller control panel and remote chiller starters;
 - 1.9 Remote reading gauges, transmitters and recorders for HVAC controls;
 - 1.10 Supply and installation of all electric/electronic motors, controllers and sensors required to meet a VAV box Direct Digital Control Specification which forms part of the Building Centralization Control and Energy Management System;
 - 1.11 Ventilation and air flow controls (manual and automatic);
 - 1.12 Domestic hot water controls (not specified as part of a packaged hot water system);
2. Building Centralization Control and Energy Management System (BBC & EMS):
 - 2.1 Centralization of air conditioning, heating, ventilation, humidification and refrigeration equipment operation;
 - 2.2 Centralized temperature, humidity, pressure and flow indication and recorders;
 - 2.3 Centralized control and monitoring of equipment and devices provided by other trades where identified as part of the BCC & EMS (all items provided by other trades and controlled from the BCC & EMS shall be complete with electrical contractors);
3. Building Life Safety Control and Equipment Safety Control:
 - 3.1 High temperature warning thermostats (fire-stats);
 - 3.2 Low temperature warning thermostats (freeze protection thermostats);
 - 3.3 Motorized smoke dampers - supplied to mechanical contractor on jobsite for unloading, distribution and installation by others;
 - 3.4 Shut-down safety devices forming part of HVAC controls;
 - 3.5 Supply and installation of all gas detection and control devices inter-faced with HVAC equipment or BCC & EMS;
4. General Items:
 - 4.1 Control wiring and/or air piping required for all BCC & EMS and HVAC controls supplied under the mechanical scope;
 - 4.2 electrical wiring, additional:
 - (a) Boiler feedwater and water treatment control wiring;
 - (b) Control wiring for gas detection and control devices interfaced with HVAC equipment or BCC & EMS;

SECTION 4

... continued

- (c) Magnetic starter coils and relay coils supplied under the electrical scope and intended for HVAC controls or BCC & EMS, including inter-locking between starters, contactors and/or relays;
 - (d) Remote thermostats and remote pre-wired auxiliary control panels for packaged HVAC equipment;
 - (e) Water treatment and water softening equipment for mechanical systems;
- 4.3 Electrical thermostats and time clocks including guards for same, used only for equipment under mechanical scope intended for HVAC controls. (Adapter plates for electrical contractor);
- 4.4 Supply and installation of pneumatic tubing to static pressure operated HVAC controls, BCC & EMS;
- 4.5 Work/materials/equipment included under Mechanical - Section 1.

EXCLUDED:

- 1. Control power supply outlets as outlined in 18 Electrical;
- 2. Control wiring for liquid level controls for sumps, condensate pumps, fuel storage tanks and control wiring for fire pumps, and booster pumps;
- 3. Fire alarm fan shut-down and start-up relays and wiring;
- 4. HVAC controls - when specified as integral part of packaged equipment;
- 5. Motorized dampers - when specified as integral part of packaged equipment;
- 6. Power/demand meters and associated contacts required for monitoring through a BCC & EMS;
- 7. Wiring of smoke or smoke/fire motorized dampers, end switches, electric damper operators and solenoid valves required for the activation of pneumatic smoke or smoke/fire damper operators (see Electrical 37 Included);
- 8. Work/materials/equipment excluded under Mechanical - Section 1;

The following items **Excluded** from this subtrade tender will be **Included** by the Prime Mechanical contractor:

- 9. Liquid level controls for sumps, condensate pumps, cooling towers, and fuel storage tanks;
- 10. Cash Allowance sum and/or contingency funds when a specific dollar amount is listed in the HVAC Controls specifications;
- 11. Safety high and low limit controls;
- 12. Self-contained control valves:
 - (a) differential pressure;
 - (b) domestic hot water;
 - (c) pressure;
 - (d) Temperature (including radiator valves);
- 13. Self-contained filter gauges;
- 14. Thermometers and pressure gauges for the heating and cooling system;
- 15. Thermostats not directly involving HVAC control systems.
- 16. Electric, electronic or pneumatic actuators and end switches for combination fire/smoke dampers (see Mechanical Section 3, Ventilation and Sheet Metal)

SECTION 5 REFRIGERATION

INCLUDED:

1. Air-cooled condensers complete with field installed inter-connecting refrigeration piping;
2. Drip pans under refrigeration piping;
3. Evaporative condensers complete with field installed inter-connecting refrigeration piping
4. Isolation of equipment;
5. Packaged refrigeration self-contained air-cooled cooling only units, including dehumidifiers, without ductwork;
6. Packaged self-contained integral DX fan coil compressor section for use with remote condensing section with or without ductwork;
7. Packaged refrigeration self-contained water-cooled cooling only units without ductwork;
8. Prefabricated coolers and freezers and/or associated refrigeration equipment (when not part of food services tender document);
9. Refrigerated dew-point controlled units (environment chambers);
10. Refrigerated room (window or wall type) air conditioners without ductwork;
11. Refrigeration chillers, liquid and air condensers complete with interconnecting refrigeration piping;
12. Refrigeration compressors, liquid receivers, thermal expansion valves, refrigeration piping, related refrigeration controls, DX refrigeration coils in built-up or add-on systems, DX fan coil units without ductwork;
13. Refrigeration controls, cooling only (excluding wiring) (when not specified under HVAC controls tender document);
14. Supply and installation of evaporate cooling towers, condenser water pumps, tanks and piping when part of an ammonia brine refrigeration system for an ice arena or ice making plant;
15. Water-cooled condensers complete with field-installed inter-connecting refrigeration piping;
16. Work/materials/equipment included under Mechanical - Section 1.

EXCLUDED:

1. Absorption and centrifugal chiller units;
2. Chilled condensing, water piping, pumps, cooling towers, and installation of same except in the supply and installation of condenser water pumps, tanks and piping when part of an ammonia brine refrigeration system for an ice arena or ice making plant;
3. Flashing and counter flashing for exterior units, gum pots, roof curbs and related water proofing;
4. Gas, water, drainage, condensate drains and connection of the same;
5. Insulation of refrigeration piping and equipment;
6. Matching distribution circuit to DX coils not supplied by this subcontractor;
7. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the Refrigeration specifications (Prime Mechanical contractor to include);
8. Prefabricated coolers and freezers and associated refrigeration equipment when there is a food service scope of work on the project;
9. Refrigerated cooling coils when integral part of a steam or hot water "fan coil" packaged unit;
10. Spray coil humidifier and dehumidifier section;
11. Vapour barrier, insulation, heat grid for recessed floor slabs under refrigerated fixtures and area;
12. Work/materials/equipment excluded under Mechanical - Section 1.

SECTION 6 INSULATION

INCLUDED:

1. Insulation for:
 - (a) Breeching, stacks and furnace flues;
 - (b) Cooling piping, vessels and equipment;
 - (c) Emergency generator exhausts;
 - (d) External duct insulation and equipment insulation (sound and thermal) complete with cladding and covering;
 - (e) External insulation for incinerator breeching or stacks;
 - (f) Heating piping, vessels and equipment;
 - (g) Plumbing piping, vessels and equipment;
 - (h) Pneumatic tubing;
 - (i) Precast manholes;
 - (j) Refrigeration piping, vessels and equipment;
2. Insulation finishes and weatherproofing;
3. Underground insulation conduits;
4. Work/materials/equipment included under Mechanical - Section 1.

EXCLUDED:

1. Asbestos removal;
2. Factory insulated equipment;
3. Insulation of concrete, masonry and drywall construction shafts, tunnels or plenums (see Mechanical Section 3, 21 Included);
4. Cash Allowance sum and/or contingency funds when a specific dollar amount is listed in the Insulation specifications (Prime Mechanical contractor to include);
5. Pipe covering protection saddles, shields and supports;
6. Refractory linings;
7. Sleeves and packing for same;
8. Vibration and sound absorption pads and isolators;
9. Work/materials/equipment excluded under Mechanical - Section 1.

SECTION 7 SPRINKLERS

DEFINITION:

Work under this sub-subcontract starts at either a flanged connection at the water meter location or point of entry of water service into the building.

INCLUDED:

1. Automatic sprinkler systems with associated detection, control panels and alarm devices, excluding wiring and connections (see Electrical 37 Included);
2. Drip pans under sprinkler piping;
3. Fire pumps, control panels, motors, engines and fuel systems when pumps supply sprinkler systems only, excluding wiring and connection;
4. Foam systems, including tanks, pumps, piping, outlets and associated detectors and control panels, excluding wiring and connections;
5. Fire standpipe system when connected to a combination sprinkler/standpipe system with or without fire pump and including:
 - (a) Fire pump, controller, hose cabinets and extinguisher located in fire hose cabinets, excluding wiring and connections (see Electrical 37 included);
6. Fire pumps, control panels, motors, engine and fuel systems when pumps supply sprinkler system or combination sprinkler/standpipe system excluding wiring and connection (see Electrical 37 included);
7. Work/materials/equipment included under Mechanical - Section 1.

EXCLUDED:

1. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the Sprinkler specifications (Prime Mechanical contractor to include);
2. Portable hand extinguishers;
3. Water service from source to meter location (mechanical contractor to supply flanged connection);
4. Wet and dry pipe standpipes c/w siamese connection and all connected hand hose cabinets and equipment;
5. Work/materials/equipment excluded under Mechanical - Section 1.
6. Master control valve at point of water entry of water service into building if required.

INSTRUMENTATION

DEFINITION:

This tender shall be for supply and installation, unless noted otherwise in this definition, of wiring, control lines, controls and instruments necessary to monitor process equipment and manufacturing machinery and shall also include the controlling of the processes for same.

A **control valve** means a valve which is remotely controlled through pneumatic, electric or hydraulic means.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

INCLUDED:

1. Air compressors, dryers, after-coolers and air distribution piping used for Instrumentation only;
2. Check out, calibrating, and commissioning of instrumentation and associated control systems upon completion of installation;
3. Control panels and consoles associated with instrumentation;
4. Core drilling, sleeves and supports;
5. Devices for monitoring and controlling the process(es) including, but not limited to, air sets, bubble tubes, recorders, computers, telemetry, counters, controllers, push buttons, lockout devices, thermo-sensors, gauges, speed controls, integrators, totalizers, probes, transducers, transmitters, control valves and remotely controlled sluice gates;
6. Electrical wiring associated with instrumentation including raceways, wireways and cable trays except where raceways, wireways and cable trays are common to electrical and instrumentation systems in which case they shall be supplied and installed under the electrical scope;
7. Excavation:
 - A. In the case of conduit and electrical lines the instrumentation contractor shall be responsible for all excavating to facilitate the installation of his work. All backfill by others except bedding and planking where specified for the protection of the electrical installation;
 - B. In the case of pneumatic or hydraulic piping the instrumentation contractor shall be responsible for all excavation to facilitate the installation of his work including shoring, pumping, bedding and the first 300 mm of protective cover over piping. Remaining backfill, tamping and disposal of surplus material by others;
8. Hoisting;
9. Inspections;
10. Manufacturer's warranty only, other than the normal one year maintenance warranty;
11. Mounting of all instrumentation devices, other than those noted under exclusions;
12. Cash Allowance and/or contingency funds when a specific dollar amount is exclusively listed in the instrumentation specifications;
13. Permits;
14. Pneumatic & hydraulic piping associated with instrumentation;
15. Power supplies which are primarily intended for instrumentation, which shall include battery banks and battery chargers;
16. Primary measuring elements including orifice plates, venturies, dahl tubes, parshall flumes (other than structural), magnetic flow meters and turbine flow meters;
17. Protection of other trades' work from damage by this trade;

INSTRUMENTATION

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18. Scaffolding;
19. Shop drawings, operating and maintenance manuals;
20. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
21. Trade clean up.

EXCLUDED:

1. Backfill and removal of excess material except as required under 7 Included;
2. Concrete;
3. Control power supply outlets as outlined in Electrical 18 Included,
4. Cutting, including core drilling and patching when pertaining to renovations, alterations or additions;
5. Distribution and installation of motorized dampers;
6. Distribution and installation of thermowells, control valves, remotely controlled sluice gates, orifice plates and primary measuring elements as related to instrumentation (see Mechanical Section 2, 3 Included);
7. General and final clean up;
8. Hoarding;
9. Instrumentation components specified as part of packaged equipment which is supplied by others;
10. Painting on-site;
11. Pressure tapping including block valves. (The instrumentation contractor to be responsible for locating pressure tapping);
12. Push-buttons, selector switches and indicating lights which come supplied with motor starters;
13. Supply and installation of companion flanges for orifice plates (see Mechanical Section 2, 35 Included);
14. Supply and installation of meter body process lines;
15. Supply and installation of sampling lines;
16. Supports where detailed on architectural or structural drawings;
17. Temporary heat, light, power, sanitation and water;
18. Waterproofing, fire-stopping and/or soundproofing in wall, floor and ceiling penetrations;
19. Weirs and weir plates.

ELECTRICAL

DEFINITIONS:

The format under this Trade Definition is based on the premise that the electrical tender normally includes the basic categories of:

- (a) Audio visual systems - complete;
- (b) Audio visual nurse call systems (incorporating voice transmission/patient wander) - complete;
- (c) Intercommunication system (internal, stand alone) - complete;
- (d) Integrated school sound / intercommunication systems - complete;
- (e) Sound distribution / Paging systems (including sound masking speech privacy system) - complete;
- (f) RF television system - complete;
- (g) CCTV system - complete;
- (h) Telephone system - complete;

and all items commonly associated with the above categories which are normally laid out in the drawings and specifications.

Complete for basic categories (a) to (h) listed above means supply and installation of all equipment and wire, including time clocks where they are for exclusive use of the system being installed. All device and equipment boxes and terminal cabinets to be supplied to the electrical contractor for installation. Electrical contractor to supply and install raceway system including pull boxes.

Packaged equipment, so specified under the mechanical scopes, shall mean pre-wired equipment supplied in a completely electrically operable state after one final connection of power wiring, and remote control connections if specified.

HVAC controls means controls for equipment that affects temperature and humidity within a building provided that the controls do not directly switch the power lines to the motors and duct heaters, in which case the wiring of such controls be the responsibility of the electrical contractor.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope:

ELECTRICAL

INCLUDED:

- 1 . Access panels for walls, ceilings and floors, where required for items under electrical scope - to be supplied to respective trade for installation, e.g. to ceiling contractor, etc.;
2. Alarm and detection systems - for systems under the electrical scope;
3. Appliances and furniture, electrical - requiring a permanent electrical connection only;
4. Balancing - for systems under the electrical scope;
5. Batteries - for systems under the electrical scope;
6. Battery chargers - for systems under the electrical scope;
7. Burglar alarm systems;
8. Buss duct;
9. Cables, electrical and heating,
10. Cable trays;
11. Car heater posts (requiring CSA approval);
12. Circuit breakers - for systems under the electrical scope;
13. Clocks and Clock systems;
14. Contactors including those required for BCC & EMS control and monitoring;
15. Control consoles - except for HVAC controls and pre-wired factory-packaged equipment;
16. Control devices - for equipment under mechanical Scope which constitute protective control required by the Canadian Electrical Code Part 1;
17. Control panels - except for HVAC controls and pre-wired factory-packaged equipment;
18. Control power supply outlets - provided at locations shown on the electrical drawings and terminated in terminal cabinets or outlet boxes. Alternatively, if no control power supply outlets are shown on the electrical drawings, the electrical contractor shall provide such outlets adjacent to the source where the power circuit originates. The wiring beyond control power supply shall fall under the scope of control wiring (see Instrumentation 3 Excluded);
19. Control wiring - for motors, solenoids, relays and duct heaters under the mechanical scope, except pre-wired packaged equipment (see Definitions) and HVAC controls that do not directly switch the power lines to the motors and duct heaters. Control wiring shall include all necessary wiring materials and connections, and the installations of controls that do not require mechanical connections;
20. Core drilling - for electrical, except if provided for under pre-cast and post-tensioned slabs specifications (see 46 Included);
21. Demolition of existing electrical installations when the materials are to be re-used or retained as specified;
22. Detectors - for systems under the electrical scope;
23. Dimmer systems;
24. Distribution equipment, electrical;
25. Door security and/or monitoring systems including remote devices, card access readers, annunciators, central processing unit, etc., as required by the system including wiring. Components of a trade name door security and/or monitoring system which is specified to be supplied by one supplier and which must be door and/or door frame mounted shall be supplied by the electrical contractor for installation by the door and/or frame supplier, otherwise, all door and/or door frame mounted components shall be supplied and installed by others; wiring for these components shall be by the electrical contractor in either case;
26. Door wiring for electric locking mechanisms including interconnecting wiring and supply of remote devices. Devices which must be door and/or door frame mounted shall be supplied and installed by others except when part of a trade name system which must be furnished by one supplier to the electrical contractor, in which case these devices shall be turned over to the door and/or door frame supplier for installation;
27. Door wiring for overhead and automatic doors - electrical supply hook up, interconnecting wiring, conduit and boxes. Control devices by others.

ELECTRICAL

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28. Drainage connections for conduit systems (excluding drain lines);
29. Duct heaters (see 44 Included);
30. Electrical thermostats - except for equipment supplied under mechanical scope. (Thermostats supplied under mechanical scope, if to be installed by electrical contractor, must be complete with adapter plates);
31. Electrical wiring for automatic underground sprinkler and/or irrigation systems (see Exterior Landscaping 2 Included);
32. Electrically activated door holding devices not forming part of door hardware system;
33. Electronic systems - for items in the electrical scope;
34. Emergency power and lighting systems - electrical;
35. Excavation - the electrical contractor shall be responsible for all excavating to facilitate the installation of his work. All backfill by others except sand and planking where specified for the protection of the electrical installation;
36. Fastenings - (screws, bolts, hangers, straps, etc.) for electrical equipment and systems;
37. Fire alarm systems - including fire phone systems, and fire alarm fan-shut-down and start-up relays and wiring. Also including wiring and connections only for fire protection systems and smoke or smoke/fire damper activation and monitoring (see Mechanical Section 2, 8 Included, Section 4, 3 Included and Section 7, 1, 3 and 4 Included);
38. Floor duct systems, electrical;
39. Gas detection systems, electrical (when causing an alarm only);
40. Generators - electrical;
41. Grounding systems;
42. Hand and hair dryers, electric;
43. Heat pumps - requiring only electrical connections;
44. Heating:
 - (a) Electrical base board heating;
 - (b) Heater (a self contained, forced air electric heater with enclosure requiring only electrical connections and no ductwork connections);
 - (c) Electric unit heaters;
 - (d) Heating cables, heating tape;
 - (e) Radiant electrical heating panels;
 - (f) Controls for above items unless forming part of HVAC controls under mechanical scope;
45. Hoisting;
46. Holes to be cut into floor duct systems (see 20 Included);
47. Horns and sirens - for systems under the electrical scope;
48. Identification and labelling, other than painted, including plastic decals for arrow flow, plastic and/or canvas, coloured tape and/or secondary colour banding (see 23 Excluded and Painting 10, Included);
49. Inspection (Electrical Protection Branch);
50. Instrument panels - for systems under electrical scope;
51. Integrated ceiling systems:
 - (a) Installation only of fixtures when they do not provide the structural element of the integrated ceiling system;
 - (b) Installation only of lenses supplied by Component Ceiling Systems contractor;
 - (c) Supply and installation of lamps;
 - (d) Supply, installation, connection and hook-up of electrical power services to integrated ceiling system light fixtures;

ELECTRICAL

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52. Interrupter switches - for systems under electrical scope;
53. Laboratory equipment, electrical - except those items included in a factory assembled casework product;
54. Licenses;
55. Lighting fixtures (complete manufactured units): All luminous elements consisting of a light source (and ballasts if required) mounted separately or as components of an over all ceiling system including fixtures for coffered ceilings, air troffers and indoor or outdoor flood lighting, to include lamps for same, lenses, globes, guards and all types of diffusers (also supports if detailed on electrical drawings only, except for fluorescent fixtures larger than 610 mm x 1220 mm);
56. Lightning protection systems;
57. Luminous ceilings: including electrical lighting fixtures and raceways only but excluding leaf-type reflectors, egg-crate reflectors, plastic or glass lenses and diffusers and all supports for same. (For lighting fixtures see 51 and 55 Included);
58. Manufacturer's warranty only, other than the normal one year maintenance warranty;
59. Marine lighting - to mechanical systems other than packaged equipment;
60. Medical gas alarm and special fire protection systems - supply and install conduit, wire and connections only;
61. Meters - for systems under the electrical scope and power meters requiring connection to the HVAC/BCC & EMS (see Mechanical Section 4, 6 Excluded);
62. Motor control centres;
63. Motor starters - all motor starters and protection switches without exception other than that equipment which forms an integral part of packaged equipment requiring a power connection only (where applicable, see Definitions);
64. Multi-speed switches including variable speed drives which are electrically initiated and operated;
65. Nurses call systems and equipment, visual (audio-visual types under sound sub-bid);
66. Operating room lights;
67. Panels, electrical;
68. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the electrical specifications;
69. Permits - as required for electrical work only;
70. Poly vapour hats;
71. Power plant equipment, (excluding fuel tanks, piping for fuel, coolants and exhaust and vent ducting) complete with prime mover, flex connections, radiator and muffler when the major function is to drive electric generators:
 - (a) For remote radiators only, piping and associated equipment including valves, pumps, expansion tanks and coolant will be provided under the mechanical scope (see Mechanical Section 2, 7 Included);
72. Power supplies - for systems under the electrical scope;
73. Power wiring - for equipment under the mechanical scope, shall include, without limiting the scope, all necessary wiring materials and connections for motors requiring protective control by the Canadian Electrical Code (Part 1), heaters, lamps, electro static filters, and controls that directly switch the power lines to such equipment. Wiring to solenoids shall fall in the category of control wiring (see 19 Included and Mechanical Section 4, 1 Excluded);
74. Power wiring for vacuum systems installed by the mechanical contractor (see Mechanical Section 2, 5 Included);
75. Primary distribution centres;
76. Protection devices and equipment;
77. Protection of other trades' work from damage by this trade;

ELECTRICAL

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78. Raceways - for systems under the electrical scope;
79. Rectifiers - for systems under the electrical scope;
80. Refrigerated rooms and coolers - electrical supply hook up only;
81. Regulators - for systems under the electrical scope;
82. Relays - for systems under the electrical scope;
83. Resistors - for systems under the electrical scope;
84. Roughing-in and connecting, only as shown on the tender documents, specialty items, cabinets or equipment supplied and installed by others;
85. Sauna, electrical;
86. Scaffolding;
87. Secondary distribution system;
88. Send/receiving devices - for systems under the electrical scope;
89. Service, electrical;
90. Services, aerial (other than utility);
91. Services and service charges: notwithstanding that all services and service charges for electrical, telephone and television as levied by the town, city or utility company may be known at the time of submitting this bid, if the Consultant has issued an addendum, in accordance with the regulations of ACTS providing for a Cash Allowance for said services, this contractor shall include that amount and indicate so on the bid (see applicable regulation under Part 4, "Notwithstanding and Pretender Conditions and Special Addenda");
92. Shop drawings where required;
93. Signalling systems - for items under the electrical scope;
94. Signs, electrical;
95. Sirens for systems under the electrical scope;
96. Site facilities, electrical;
97. Sleeves, through poured-in-place concrete and masonry where required for electrical conduit, wire or equipment;
98. Smoke detection systems, electrical;
99. Snow melting cables;
100. Solar power and heating systems (electrical) (see Mechanical Section 2, 32 Included),
101. Sprinkler annunciator systems, electrical;
102. Substations (electrical portion);
103. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
104. Supports - where detailed on electrical drawings only (see 55 Included and 27 and 30 Excluded);
105. Surveillance systems (television bid under sub-trade (g));
106. Switch boards;
107. Switches - all types of electrical switches for systems under the electrical scope except where part of packaged equipment supplied by others;
108. Teleautograph devices;
109. Telephone systems, private automatic (bid under sub-trade (d));
110. Temperature control system and devices for electric heating supplied by the electrical trade;
111. Thermocouple wiring and thermocouple sensor wiring except for HVAC controls;
112. Time recording system;
113. Timers and time clocks - for systems under the electrical scope;
114. Trade clean up;

ELECTRICAL

...continued

115. Transformers - for systems under the electrical scope;
116. Valance and cove lighting: including electrical lighting fixtures and raceways only but excluding leaf-type reflectors, egg crate reflectors, plastic or glass lenses and diffusers and all supports for same. (For lighting fixtures see 51 Included);
117. Wall panels - for systems under the electrical scope;
118. Watchman's clocking equipment - for systems under the electrical scope;
119. Wiring devices and plates - for systems under the electrical scope;
120. Wiring and equipment for transformer vaults;
121. Wire for branch circuits, feeders - for systems under the electrical scope;
122. Wiring - line voltage (field) wiring of food services refrigeration systems including the wiring of line voltage time clocks, thermostats and solenoids.
123. X-ray viewers.

EXCLUDED:

1. Alterations of services, as specified in the tender documents, required for specialty items, cabinets or equipment not supplied under this subcontract;
2. Backfill and removal of surplus material;
3. Backing and backing materials, supply and installation;
4. Concrete;
5. Control and protection devices for refrigerated rooms and coolers;
6. Control and protection devices for overhead and automatic doors, wiring for overhead doors;
7. Control wiring for equipment under mechanical scope intended for HVAC controls, including solenoids, valves and dampers;
8. Cutting, including core drilling and patching - when pertaining to renovations, alterations or additions;
9. Door access card readers or other devices which are door and/or door frame mounted except when part of systems furnished by one supplier (see 25 and 26 Included); wiring for same regardless of supplier is by electrical contractor;
10. Door holding devices forming part of door hardware system;
11. Drain lines,
12. Fire-stopping;
13. Food service and laundry equipment unless specified in the electrical specifications;
14. Fuel tanks, piping for fuel, coolants and exhaust and vent ducting for power plant equipment;
15. General and final clean up;
16. Hoarding;
17. Installation of plaster trims (frames) for lighting fixtures;
18. Instrumentation;
19. Integrated Ceiling Systems:
 - (a) Installation of electrical fixture components except lenses when forming an integral part of the integrated ceiling system and where the fixture provides the structural element of the system;
 - (b) Supply of electrical fixture components including lenses when an integral part of the ceiling system;
 - (c) Suspension system including support devices for electrical and mechanical fixtures and associated accessories;
20. Laboratory equipment which is part of factory assembled casework product;
21. Luminous light lenses and/or decorative lenses and/or louvres, including metal and/or plastic support mouldings when installed in architectural valences; (see Component Ceiling Systems 9 Included, Architectural Woodwork A31 and Lath, Plaster & Stucco and Drywall);
22. Manhole covers and frames;
23. Painting (on site) (see 48 Included);
24. Portable appliances and portable furniture, and electrical fixtures, devices and cords affixed thereto;

ELECTRICAL

...continued

25. Shop equipment or tools;
26. Soundproofing in wall, floor and ceiling penetrations;
27. Supports where detailed on architectural or structural drawings (see 104 Included);
28. Temporary heat, light, power, sanitation and water;
29. Thermostats and guards for equipment under mechanical scope;
30. Trims or mouldings for lighting fixtures other than manufactured plaster trims and those supplied with the fixture;
31. Valances and coves for lighting fixtures (see Component Ceiling Systems 9 and 12 Included);
32. Variable speed controllers that are mechanically or hydraulically initiated and operated or part of packaged equipment so specified under the mechanical scopes;
33. Waterproofing in wall, floor and ceiling penetrations;
34. Wiring for electric elevators, hydraulic elevators, parking garage hoists, escalators, dumbwaiters, conveyors, moving walkways, speed ramps, except as noted under Elevators and Escalators scopes.

PREFORMED METAL WALL AND SOFFIT CLADDING

DEFINITION:

This tender shall be for the supply and installation of preformed metal wall and soffit cladding.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope.

INCLUDED:

1. Cladding roll formed from sheet steel (prepainted, galvanized, galvalume finish), stainless or weathering steel, aluminum or other metals;
2. Liner panel of materials listed (item 1 above) forming part of a preformed metal wall and/or soffit cladding assembly;
3. Aluminum soffit, fascia, siding, gutter and downspouts;
4. Gutter and downspouts that form an integral part of the preformed metal wall and soffit cladding;
5. Related closures, caulking, flashings and fasteners incorporated into the system;
6. Internal sub-grits;
7. Related insulation, adhesives, vapour barriers and air barriers including other materials from the barriers to the finished metal surface;
8. Stationary louvres of matching materials (installed in cladding) including wire mesh or bird screens;
9. Translucent panels to match cladding profile;
10. Flexible sheet membrane which forms part of the building air barrier directly behind the metal cladding system including connection work of preceding trade where required. If connection is required by any trade following the metal cladding installation then the cladding contractor provides a maximum 200 mm, unless otherwise specified, of overlap material beyond the exterior point of the metal cladding system;
11. Manufacturers warranty only beyond the normal one year maintenance warranty;
12. Hoisting;
13. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the preformed metal wall and soffit cladding specifications;
14. Scaffolding;
15. Shop drawings;
16. When any prefinished metal flashing of the cladding system is required by other trades that specifically matches in colour and gauge that specified for the metal wall cladding, then the prefinished flat sheets are to be supplied by the trade F.O.B. the contractors shop (see 2 Excluded), the supply of flashing material does not apply to this trade if duplicated under the metal roofing scope;
17. Trade cleanup;
18. Protection of other trades' work from damage by this trade;
19. Supply and/or installation of materials and other work that may be assigned by pretender ruling.

EXCLUDED:

1. Metal deck;
2. Fabrication or installation of any flashing material not incorporated into metal cladding system (ie. flat prefinished material for built-up roofing contractor);
3. Wood or metal components of the wall (unless as incorporated in the preformed metal wall system) used to construct parapets, pony walls, structural frames, etc;
4. Gypsum board and metal support for same;

PREFORMED METAL WALL AND SOFFIT CLADDING

... continued

5. Metal spandrel and infill panels incorporated into glazed systems;
6. Extruded aluminium wall cladding;
7. Metal roofing;
8. Firestopping;
9. Insulation or vapour barrier behind structure which cladding system is fastened to;
10. Metal soffit and/or wall cladding if profile, gauge and colour is to match metal roofing;
11. Architectural Metal Panels;
12. Factory pre-assembled translucent panels;
13. Backing and supports for other trades;
14. Structural purlins and girts;
15. Metal linear ceiling profiles;
16. General and final clean up;
17. Hoarding;
18. Temporary heat, light, power, sanitation and water.

ARCHITECTURAL METAL PANELS

DEFINITION:

This tender shall be for the supply and installation of Architectural Metal Panels. The surface is flat faced or custom curved. The metal panels shall be formed from aluminium, steel, galvanized steel or galvalume, stainless steel, copper or other metals. The finish or coating is shop applied, prepainted, anodized or porcelain enamel.

This contractor shall include and exclude the following items regardless of where they appear in the tender documents unless specifically noted otherwise in this scope.

INCLUDED:

1. Architectural Metal Panels formed from aluminium or steel or other metals, with either a shop applied, prepainted, anodized or porcelain enamel, finish/coating;
2. Aluminium composite panel systems;
3. Factory insulated metal building panels;
4. Related caulking, flashing and fasteners incorporated into the system;
5. Clips and sub-girts;
6. Plywood or gypsum board when forming part of the panel system (ie. Laminated);
7. Related insulation, adhesives, vapour barriers and air barriers;
8. Flexible sheet membrane which forms part of the building air barrier directly behind the Architectural Panel System including connection to work of preceding trade where required. If connection is required by any trade following the metal panel installation then the metal panel contractor provides a maximum 200 mm, unless otherwise specified, of overlap material beyond the exterior point of the Architectural Metal Panel System;
9. Manufacturers warranty only beyond the normal one year maintenance warranty;
10. Hoisting;
11. Cash Allowance and/or contingency funds when specific dollar amount is listed in the Architectural Metal Panel Specification;
12. Scaffolding;
13. Shop drawings;
14. Trade clean-up;
15. When any prefinished metal flashing of the Architectural Panel System is required by other trades that specifically matches the panel colour and gauge and is not duplicated by the supply of the prefinished flat sheets applicable to preformed metal wall and metal roofing, then it is to be supplied by the trade F.O.B. the contractors shop (see 1 of Excluded);
16. Protection of other trades' work from damage by this trade;
17. Supply and/or installation of materials and other work that may be assigned by pretender ruling.

EXCLUDED:

1. Fabrication and/or installation of any flashing material not incorporated into Architectural Metal Panel System (ie. Flat prefinished sheet material for built-up roofing contractor);
2. Extruded aluminium wall or soffit cladding;
3. Metal spandrel and infill panels incorporated into glazed systems;
4. Metal roofing and metal wall and soffit cladding;
5. Wood or metal components of the wall (unless incorporated in the panel system) used to construct parapets, pony walls, structural frames, etc.;
6. Factory pre-assembled translucent panels;
7. Insulation or vapour barrier behind structure which panel system is fastened to;
8. Backing and support for other trades;
9. Firestopping;
10. General and final clean-up;
11. Temporary heat, light, power, sanitation and water;
12. Hoarding;
13. Stainless steel items which do not form a part of the Architectural Metal Panels System.

METAL ROOFING

DEFINITION:

This tender shall be for the supply and installation of metal roofing.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope.

INCLUDED:

1. Metal roof cladding, metal tiles, metal shingles formed from sheet steel (Prepainted, galvanized, or galvalume finish), aluminum, stainless steel, copper or other metals;
2. Related closures, caulking, flashings and fasteners incorporated into the system;
3. Internal sub-girts and clip systems;
4. Liner panel of materials listed (item 1 above) forming part of the preformed metal roofing assembly;
5. Gypsum board when applied over a roof deck as part of the roofing system;
6. Auxiliary boards such as plywood and/or wood strapping when applied over a roof deck as part of the metal roofing system;
7. Related insulation, adhesives, vapour barriers and air barriers;
8. Flexible sheet membranes which form part of the building air barrier directly behind the metal roofing system including connection to work of preceding trade where required. If connection is required by any trade following the metal roofing installation then the metal roofing contractor provides a maximum 200 mm, unless otherwise specified, of overlap material beyond the exterior point of the metal roofing system;
9. Gutter and downspouts that form an integral part of the preformed metal roofing system;
10. Installation only of acoustical insulation strips for acoustic steel deck which is supplied by others in a preformed custom fitted condition;
11. Metal soffits and/or wall cladding if profile, gauge and colour is to match metal roofing including related insulation, vapour barrier and sub-girts;
12. Acrylic or polycarbonate skylights, fibreglass skylights (when same profile as metal roof), smoke or access hatches, all when used within the "Preformed metal roofing" area;
13. Manufacturers warranty only beyond the normal one year maintenance warranty;
14. Hoisting;
15. Cash Allowance and/or contingency funds when a specific dollar amount is listed in the preformed metal roofing specifications;
16. Scaffolding;
17. Shop drawings;
18. When any prefinished metal flashing is required by the other trades that specifically matches in colour and gauge that specified for the metal roofing, then the prefinished flat sheets are to be supplied by this trade F.O.B. the contractors shop. (See 2. of excluded);
19. Trade clean-up;
20. Protection of other trades' work from damage by this trade;
21. Supply and/or installation of materials and other work that may be assigned by pretender ruling.

EXCLUDED:

1. Metal deck;
2. Fabrication and/or installation of any flashing material not incorporated into metal roof system (ie. Flat prepainted material for built up roofing contractor);
3. Wood or metal components of the roofing (unless as incorporated in the preformed metal roofing system) used to construct; parapets, perimeter and curb blocking, curbs, control joints and sleeper supports;

METAL ROOFING

... continued

4. Metal soffits and/or wall cladding (see item 11. included);
5. Aluminum / glass or aluminum / fibreglass skylight systems or skylights outside the preformed metal roofing area;
6. Separate curbs for skylights or hatches, etc.,
7. Flashing for mechanical vents, chimneys, etc.;
8. Through wall flashing;
9. Backing and supports for other trades;
10. Purlins or other structural materials;
11. Insulation or vapour barrier behind structure which metal roofing is fastened to;
12. General and final clean-up;
13. Temporary heat, light, power, sanitation and water;
14. Hoarding;
15. Roof drains connected to an internal system.

METAL DECK

DEFINITION:

This tender shall be for the supply and installation of metal deck.

This contractor shall include and exclude the following items regardless of where they may appear in the tender documents unless specifically noted otherwise in this scope.

INCLUDED:

1. All metal decking including but not limited to the following;
 - (a) Metal roof deck;
 - (b) Metal floor deck;
 - (c) Acoustic roof deck;
 - (d) Prepainted roof deck;
 - (e) Metal deck to wall areas;
2. Steel and foam cell deck closures where installed between structural support and decking;
3. Supply only, notched metal or foam cell deck closures incorporated into other construction from top or underside of deck;
4. Cutting of openings in deck marked by other trades at the time of deck installations;
5. Reinforcing of premarked openings in roof deck up to 450 mm across the flutes and 300 mm in floor decking;
6. Shear connectors when shown field welded through the metal deck;
7. Touch up top (and bottom side of decking where architecturally exposed), where metallic coating has been burned or marred by welding (see 2 Excluded);
8. Metal cover plates over deck at change of plane or direction;
9. Guarantee;
10. Hoisting;
11. Cash Allowance and/or contingency funds when specific dollar amount is listed in the metal deck specifications;
12. Shop drawings;
13. Protection of other trades' work from damage by this trade;
14. Trade clean-up;
15. Scaffolding;
16. Supply and/or installation of materials and other work that may be assigned by pretender ruling;
17. Acoustic insulation strips for acoustic roof deck supply only to the trade requiring.

EXCLUDED:

1. Reinforcing or structural framing of openings larger than mentioned in 5 of inclusions;
2. Field painting including touch-up to the underside of deck, top cords or flanges of supporting steel members where discolouration due to welding has occurred on non exposed deck;
3. Mechanical clips, nails, adhesives or other fasteners for securing insulation, thermal barrier or vapour retarder to steel deck;
4. Cutting and drilling of holes for attachment of suspended ceiling hangers or for attachment of any work by other trades;
5. Bearing plates, shelf angles, supports at steel columns and/or other structural materials required to support the steel deck;
6. Wood nailers, cants, vapour retarder, insulation, thermal barrier, waterproofing membrane and ballast;
7. Architectural trim;
8. Forming at floor deck perimeter or openings;
9. Cutting openings in floor deck after concreting;

METAL DECK

..continued

10. Shoring under composite floors;
11. Supply and/or installation of shear connectors not welded through metal deck;
12. Shear transfer elements;
13. Firestopping;
14. Metal cladding;
15. Metal roofing;
16. Caulking;
17. General and final clean-up;
18. Hoarding;
19. Temporary heat, light, power, sanitation and water.