

Part 1 General

1.1 STORAGE, HANDLING AND PROTECTION

- .1 Store, materials to be reused, recycled and salvaged in locations as directed by Departmental Representative.
- .2 Protect structural components not removed for demolition from movement or damage.
- .3 Support affected structures. If safety of building is endangered, cease operations and immediately notify Departmental Representative.
- .4 Protect architectural, mechanical and electrical systems from damage.
- .5 Separate and store materials produced during dismantling of structures in designated areas.

1.2 TRANSPORTATION

- .1 Pay costs of transportation of products required in performance of Work.
- .2 Transportation cost of products supplied by Departmental Representative will be paid for by Departmental Representative. Unload, handle and store such products.

1.3 MANUFACTURER'S INSTRUCTIONS

- .1 Unless otherwise indicated in specifications install or erect projects in accordance with manufacturer's instructions. Do not rely on labels or enclosures provided with products. Obtain written instructions directly from manufacturers.
- .2 Notify Departmental Representative in writing, of conflicts between specifications and manufacturer's instructions, so that Departmental Representative will establish course of action.
- .3 Improper installation or erection of products, due to failure in complying with these requirements, authorizes Departmental Representative to require removal and reinstallation at no increase in Contract Price or Contract Time.

1.4 QUALITY OF WORK

- .1 Ensure Quality of Work is of highest standard, executed by workers experienced and skilled in respective duties for which they are employed. Immediately notify Departmental Representative if required Work is such as to make it impractical to produce required results.
- .2 Do not employ anyone unskilled in their required duties. Departmental Representative reserves right to require dismissal from site, workers deemed incompetent or careless.
- .3 Decisions as to standard or fitness of Quality of Work in cases of dispute rest solely with Departmental Representative, whose decision is final.

1.5 CO-ORDINATION

- .1 Ensure co-operation of workers in laying out Work. Maintain efficient and continuous supervision.
 - .2 Be responsible for coordination and placement of openings, sleeves and accessories.
 - .3 Coordinate the Work with all other Divisions, to ensure system compatibility, and to ensure schedules and requirements are maintained.
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- .4 Where perceived interferences occur, prepare detailed sketches indicating proposed solution for review and acceptance by Departmental Representative.

1.6 CONCEALMENT

- .1 In finished areas conceal pipes, ducts and wiring in floors, walls and ceilings, except where indicated otherwise.
- .2 Before installation inform Departmental Representative if there is interference. Install as directed by Departmental Representative.

1.7 REMEDIAL WORK

- .1 Perform remedial work required to repair or replace parts or portions of Work identified as defective or unacceptable. Co-ordinate adjacent affected Work as required.
- .2 Perform remedial work by specialists familiar with materials affected. Neither perform in a manner to damage nor put at risk any portion of Work.

1.8 LOCATION OF FIXTURES

- .1 Consider location of fixtures, outlets, and mechanical and electrical items indicated as approximate.
- .2 Inform Departmental Representative of conflicting installation. Install as directed.

1.9 FASTENINGS

- .1 Provide metal fastenings and accessories in same texture, colour and finish as adjacent materials, unless indicated otherwise.
- .2 Prevent electrolytic action between dissimilar metals and materials.
- .3 Space anchors within individual load limit or shear capacity and ensure they provide positive permanent anchorage. Wood, or any other organic material plugs are not acceptable.
- .4 Keep exposed fastenings to a minimum, space evenly and install neatly.
- .5 Fastenings which cause spalling or cracking of material to which anchorage is made are not acceptable.

1.10 FASTENING – EQUIPMENT

- .1 Use fastenings of standard commercial sizes and patterns with material and finish suitable for service.
- .2 Use heavy hexagon heads, semi-finished unless otherwise specified. Use No. 304 stainless steel for exterior areas.
- .3 Bolts may not project more than one diameter beyond nuts.
- .4 Use plain type washers on equipment, sheet metal and soft gasket lock type washers where vibrations occur. Use resilient washers with stainless steel.

1.11 PROTECTION OF WORK IN PROGRESS

- .1 Prevent overloading of parts of building. Do not cut, drill or sleeve load bearing structural member, unless specifically indicated without written approval of Departmental Representative.
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1.12 EXISTING UTILITIES

- .1 When breaking into or connecting to existing services or utilities, execute Work at time directed by local governing authorities, with minimum of disturbance to Work, and/or building occupants. Coordinate all Work affecting services of utilities in areas not under construction with Departmental Representative.
- .2 Protect, and maintain existing active services.
- .3 . When services are encountered, cap off in manner approved by authority having jurisdiction. Stake and record location of capped service.

1.13 GENERAL CAMPUS PROCEDURES

- .1 Access & Security
 - .1 Contractors must sign-in to receive an access badge at the guardhouse. Valid Photo ID is required.
 - .2 Contractors must sign-in at DFL contractor's electronic station or on-site project log-book.
 - .3 Badges must be worn visibly at all time; all lost badges must be reported immediately to DFL Commissionaire for notification to the guardhouse.
 - .4 Contractors must be escorted at ALL times by either a DFL Commissionaire or cleared DFL personnel responsible for the contractor.
 - .5 Normal working hours are Monday to Friday - from 07:00am to 3:30pm. Any hours outside that range are considered as 'after-hours / silent hours' and must require minimum of full 3 working day's notification with the names of all workers to be provided to the DFL project manager.
 - .6 Parking spots for contractor and all his sub-contractors to be designated by DFL project manager, all illegal parking will be ticketed by campus security.
 - .7 Careful attention must be paid to posted speed limits. RCMP is active on the campus and will issue tickets for speeding.
 - .2 Site Facilities
 - .1 No large storage available on site, storage of small items must have previous arrangement in place.
 - .2 Construction activities must remain within the predefined boundaries unless otherwise permitted in writing.
 - .3 Do not block campus roads or parking spots at any time. Moving & operation of all heavy machinery, lifts or cranes for construction or deliveries must be coordinated and approved by DFL project manager at a minimum of full 2 working days' notice.
 - .4 Do not dump any hazardous materials or any kind of contamination in campus drains or manholes, report any equipment fuel or hydraulic oil leaks immediately to DFL project manager. Any leaks to be immediately contained & cleaned in a proper and legal manners.
 - .5 Contractor to be responsible for any damages to campus roads, sidewalks, pavement, lawns, trees, plans, signs, light / camera posts... etc. resulting from all project's work. The contractor shall fix & make good all damaged surfaces. All
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new & remedial work within construction area should be equal or better condition than it was before starting construction and subject to CSA & campus approvals, all at no additional cost to CSA or campus.

- .3 Communication & Photography
 - .1 Phone at the Commissionaire's station or DFL basement is permitted for use.
 - .2 No cell phones will be permitted on site.
 - .3 No cameras permitted on site; any requirement for pictures will come as a request to Department Representative.
- .4 Hot Work Permits
 - .1 Any work that will create smoke, dust or heat must be coordinated at a minimum of three full working days in advance to DFL Project Manager for the issuance of a hot work permit, for each day required.
- .5 Workmanship & Ethics
- .6 Cleanliness is of the utmost importance; it is expected that construction cleanup will be at the end of each day.
- .7 Foul language or improper behavior will not be tolerated.
- .8 Proper building and site protection must be provided at all times.
- .9 Health and Safety practices must be strictly observed on site at all times.

1.14 DFL ARCHITECTURAL STANDARDS

- .1 Core drill / cut concrete and metal floors as required permitting installation of all new services as per drawings and owner instructions & requests. Patch & infill abandoned & unused holes with high strength non-shrink grout and reinforce with wire mesh as required.
 - .2 Contractor to protect all architectural finishes & flooring during construction, be responsible for any damages to existing surfaces resulting from all project's work. The contractor shall make good all damaged surfaces including any paint touch-ups required. Repair all walls, floors & ceilings in core area where mechanical & electrical services pass through.
 - .3 Unless noted otherwise, all dimensions shown are from finished faces to finished face of walls, ceilings and other surfaces as referred. Dimensions indicated as clear dimensions shall be from finished surfaces.
 - .4 Departmental Representative to approve layout of partitions prior to construction (chalk line)
 - .5 Unless noted otherwise, carry over the same partition details over door openings and sidelight openings. brace walls and door frames as required to u/s of structural deck and/or suspended ceilings
 - .6 Use dust control gypsum board compound on final coat.
 - .7 Contractor to provide all necessary and required blocking in wall and ceiling where heavy loading is anticipated. These blocking and reinforcements may not be shown on drawings and details. All reinforcements in ceiling plenum areas shall be of non-combustible and shall not generate airborne particles.
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- .8 Contractor to provide complete system of equipment supports / anchors in accordance with MSS SP-58 and MSS SP-69 and to match existing building supports. Use of C-clamps on beams is not permitted, use beam clamp to support all threaded rods.

1.15 DFL CLEAN ROOM PROCEDURES

- .1 Cleanroom Regulations and Clothing Requirements
1. Clean Rooms are all areas within the air showered rooms, except the loading dock(s) and change rooms.
 2. All other areas are not considered as "Clean Rooms".
 3. When working within the clean room(s), all personnel shall:
 1. Wear a clean room coat (cloth or disposable), completely fastened.
 2. Wear a disposable head / beard cap ensuring all hair is covered by the cap.
 3. Ensure footwear is clean.
 4. Attire not approved in clean rooms include shorts, skirts, dresses, open shoes (sandals, flip-flops, etc.), high heel shoes are not preferred for safety and protection of floor finishes.
- .2 Clean Room Entry & Exit Procedures
1. Personnel must remove all weather protection clothing (coats, boots etc.) prior to entering any clean room.
 2. Shoes must be cleaned using the shoe cleaner.
 - .1 Shoe cleaners are not intended for use on heavily soiled footwear
 3. All personnel must use the air shower prior to entering the change room.
 4. Personnel must walk on the sticky mats prior to entering the clean room.
 5. Exit from any clean room will be either through the air shower (which does not operate on exit), or via direct exit door.
- .3 Working Within the Clean Rooms
- .1 Any drilling, cutting, grinding, filing or other jobs creating swarf or debris must be done with a HEPA vacuum running at all times to collect all debris generated.
 - .2 All equipment, materials, lifts or cranes brought into the clean room from the outside must be thoroughly cleaned prior to entry and clear of any dust, mud or loose particles.
- .4 Clean Room Containers
- .1 Containers must be constructed from metal, plastic or smoothly finished wood, and must be sealed with urethane or oil-based paint.
 - .2 Insulation, either fixed or removable must be sealed to prevent shedding.
 - .3 Containers brought into the clean room from the outside must be thoroughly cleaned prior to entry and completely wrapped in new clean plastic or cling film.
 - .4 NO cardboard boxes or bare wood are permitted in the clean rooms.
 - .5 Interior loading dock doors must not be opened while the exterior loading dock door is open.
- .5 Prohibited Clean Room Practices
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- .1 Wearing clean room clothing outside designated clean rooms and controlled areas.
- .2 Wearing street clothes in designated clean rooms and controlled areas.
- .3 Grooming, eating, drinking or smoking within any designated clean room or controlled area.
- .4 Painting or leaving chemical containers and contaminants open or exposed in any designated clean room or controlled area.
- .5 No radios or music is allowed in clean rooms and controlled areas.
- .6 Cameras and photos are totally prohibited in clean rooms and controlled areas.
- .7 Failing to clean job sites at the completion of a job or at the end of a shift.
- .8 ADMITTING UNAUTHORIZED PERSONNEL INTO THE DFL SECURED AREAS WITHOUT AUTHORIZATION.

Part 2 Products

2.1 NOT USED

- .1 Not used.

Part 3 Execution

3.1 NOT USED

- .1 Not used.