DRAWING LIST

ARCHITECTURAL

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Canadian Space Agency / Agence spatiale canadienne

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MECHANICAL/ELECTRICAL

CSA13-G3
DFL FIRE SEPARATIONS
BUILDING UPGRADES, Phase 1

3701 CARLING AVE
OTTAWA, ON

14-004

ISSUED FOR TENDER
2014.07.23

11. PROVIDE TWO STUDS EXTENDING FROM FLOOR TO CEILING AT EACH SIDE OF O OPENINGS WIDER THAN STUD CENTERS SPECIFIED. SECURE STUDS TOGETHER, 2" APART USING COLUMN CLIPS OR OTHER APPROVED MEANS OF FASTENING PLACED ALONGSIDE FRAME ANCHOR CLIPS.

12. INSTALL YIELDING TRACK UNDER POSTS AND SLABS SO THAT ROOF STRUCTURE IS NOT SUPPORTED BY POSTS AND ALL FIRE RESISTANT PARTITIONS.

13. AT THE INTERSECTION OF A NEW GYPSUM BOARD WALL AND AN EXISTING PLASTER WALL, REMOVE A PLASTER STRIP OF +—4" AND APPLY TIP OF LAST GYPSUM BOARD PANEL OF NEW WALL. MAKE SURE THE WHOLE IS LINEAR.

09.2 - PAINT

1. REFERENCE STANDARDS: USE ONLY PAINT MATERIALS LISTED ON THE CGSB QUALIFIED PRODUCTS LIST, CURRENT EDITION. PAINT MATERIALS FOR EACH COATING FORMULA TO BE PRODUCTS OF A SINGLE MANUFACTURER.

2. SAMPLES: SUBMIT IN DUPLICATE FOR APPROVAL 610mm X 610mm SAMPLE FOR EACH COLOR.

3. CLEAN SURFACES TO BE PAINTED. REFER TO MANUFACTURER SPECIFICATIONS.

4. SAND AND DUST BETWEEN EACH COAT TO REMOVE DEFECTS VISIBLE FROM A DISTANCE OF 1.5m

5. FINISH TOP, BOTTOM, EDGES AND CUT—OUTS OF DOORS AFTER FITTING AS SPECIFIED FOR DOOR SURFACES. DO NOT PAINT OVER ULC LABELS. PAINT STEEL DOORS WITH AIRLESS SPRAYER.

6. PAINT EXPOSED CONDUITS, PIPING, HANGERS, DUCTWORK AND OTHER MECHANICAL AND ELECTRICAL EQUIPMENT. EXPOSED MECHANICAL AND ELECTRICAL DUCTWORK TO MATCH COLOR OF ADJACENT WALLS AND CEILINGS. DO NOT PAINT OVER PREPAINTED ELEMENTS, NAMEPLATES AND LABELS.

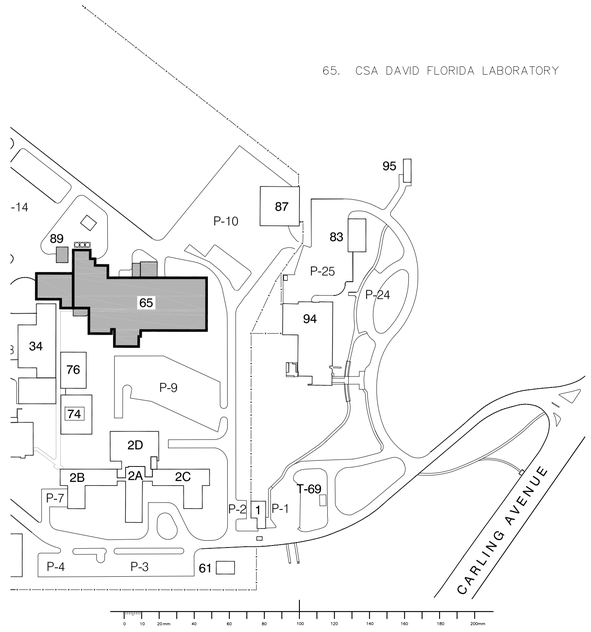
7. USE PRODUCTS WITH SAME COLOUR AND SAME SHEEN AS EXISTING FINISHES TO PATCH EXISTING SURFACES AFFECTED BY WORK. PAINT UP TO NEXT VERTICAL JOINT. USE PRODUCTS COMPATIBLE WITH EXISTING PRODUCTS.

8. FORMULA NO.1 FOR INTERIOR WALLS OF GYPSUM BOARD
—ONE COAT PRIMER—SEALER. REFERENCE PRODUCT: 870—130 BY SICO.
—TWO COATS LATEX INTERIOR PAINT. PLATINUM FINISH. REFERENCE PRODUCT : 874 BY SICO.

9. FORMULA NO.2 FOR INTERIOR CEILINGS OF GYPSUM BOARD
—ONE COAT PRIMER—SEALER. REFERENCE PRODUCT: 870—130 BY SICO.
—TWO COATS LATEX INTERIOR PAINT. MATT FINISH. REFERENCE PRODUCT : 871—112 BY SICO.

10. FORMULA NO.3 FOR INTERIOR SHOP PRIMED FERROUS METAL SURFACES
—PRIME COAT. REFERENCE PRODUCT : 922—260 BY SICO
—TWO COATS ALKYD PAINT, PEARL FINISH, REFERENCE PRODUCT : 886 BY SICO.

65. CSA DAVID FLORIDA LABORATORY



1 A—101 SITE (KEY) PLAN
1: 2500

CLIENT

Canadian Space Agency / Agence spatiale canadienne

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PROJECT NORTH

SEAL

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DATE	DESCRIPTION	ISSUE	REV.
2014.07.23	ISSUED FOR TENDER	02	
2014.07.21	ISSUED FOR REVIEW	01	

PROJECT NAME

DFL FIRE SEPARATIONS BUILDING UPGRADES, Phase 1

3701 CARLING AVE
OTTAWA, ON

DRAWING TITLE

ABBREVIATED SPECIFICATIONS
CONTINUED and KEY PLAN

DATE	L+D PROJECT NO.	CSA PROJECT NO.
2014.06.03	14.004	CSA13-G3
SCALE AS NOTED		

DRAWN BY	DRAWING NO.
RJ	A-101
REVIEWED BY LCL	

01.1 - GENERAL

1. THE PRESENT ABRIDGED SPECIFICATIONS AS WELL AS THE NOTES ON THE DRAWINGS SET OUT THE GUIDELINES FOR THE EXECUTION OF THE WORK AND LIST IN A GENERAL WAY THE REQUIRED MATERIAL. THE WORK MUST BE PERFORMED PROFESSIONALLY TO UPHOLD THE HIGHEST STANDARDS OF THE INDUSTRY.
2. UNLESS OTHERWISE INSTRUCTED, SUPPLY THE LABOUR, MATERIALS AND TOOLS REQUIRED TO PERFORM DEMOLITION AND CONSTRUCTION WORK. CARRY OUT WORK NOT LISTED BUT IMPLICITLY NECESSARY FOR THE COMPLETE REALIZATION OF THE PROJECT.
3. NO ADDITIONAL AMOUNT SHALL BE GRANTED FOR WORK PERFORMED WHICH IS NOT REQUIRED BY THESE DOCUMENTS WITHOUT THE OWNER'S PRIOR AUTHORIZATION.
4. ASSUME ALL OBLIGATIONS AND RESPONSIBILITIES ASSIGNED TO THE PRINCIPAL CONTRACTOR UNDER THE ACT RESPECTING OCCUPATIONAL HEALTH AND SAFETY.
5. OBTAIN ALL LICENSES, PATENTS AND CERTIFICATES NECESSARY TO PERFORM THE WORK. THE CONTRACTOR MUST COMPLY WITH AND ENFORCE PROVINCIAL, FEDERAL AND MUNICIPAL LAWS, BY–LAWS, REGULATIONS, ORDERS, DECREES, CODES AND COLLECTIVE AGREEMENTS AFFECTING THE CONSTRUCTION AND THE LABOUR FORCE. PERFORM WORK IN COMPLIANCE WITH THE ONTARIO CONSTRUCTION CODE.
6. UNLESS OTHERWISE INSTRUCTED, ALL ELEMENTS ARE GUARANTEED ONE (1) YEAR FROM PROVISIONAL ACCEPTANCE OF WORK.
7. CHECK ALL DIMENSIONS ON THE SITE BEFORE STARTING THE WORK. ASSUME RESPONSIBILITY FOR THE DIMENSIONS MEASURED FROM THE PLANS. IMMEDIATELY INFORM THE CONSULTANTS OF ANY DISCREPANCY BETWEEN THE DRAWINGS AND THE SITE.
8. DESIGN DRAWINGS PREVAIL OVER MECHANICAL AND ELECTRICAL DRAWINGS REGARDING THE LOCATION OF MECHANICAL AND ELECTRICAL EQUIPMENT. MECHANICAL AND ELECTRICAL DRAWINGS PREVAIL IN TERMS OF EQUIPMENT QUANTITY AND SPECIFICATIONS.
9. WHERE SEVERAL CONTROLS MUST BE INSTALLED IN THE SAME ROOM (THERMOSTATS, SWITCHES, ETC), ALIGN AND REGROUP THE LATTER ON THE SAME WALL.
10. COORDINATE THE WORK WITH THAT OF OTHER CONTRACTORS AND ENSURE CONTINUITY WITH THE WORK OF OTHER CONTRACTORS.
11. LIMIT ACTIVITIES TO WORKING AREAS. STORE TOOLS AT THE END OF EACH WORKING DAY. TAKE ALL NECESSARY MEASURES TO PROTECT ADJACENT AREAS, INCLUDING CORRIDORS AND STAIRCASES, FROM ANY DUST AND DEBRIS.

01.2 - PRODUCT

1. PROVIDE NEW MATERIAL, IN GOOD CONDITION AND OF MAXIMUM AVAILABLE DIMENSIONS, UNLESS OTHERWISE INSTRUCTED.
2. NEW ELEMENTS AS WELL AS EXISTING ELEMENTS TO BE PRESERVED IN GOOD CONDITION UNTIL ACCEPTANCE OF THE WORK BY THE OWNER. INSTALL NAMELY, BUT WITHOUT LIMITATION, A PROTECTION ON FLOOR FINISHES. REPLACE ANY ELEMENTS DAMAGED DURING THE WORK WITHOUT COST TO THE OWNER.
3. BRAND SPECIFICATION IS FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR IS TO SUBMIT A WRITTEN REQUEST FOR EQUIVALENCY BEFORE BID CLOSING. REQUESTS FOR EQUIVALENCY SUBMITTED AFTER BID OPENINGS AND ANALYSES WILL BE REJECTED.
4. PROVIDE SHOP DRAWINGS AND TECHNICAL DATA SHEET FOR ALL MANUFACTURED OR CUSTOM MANUFACTURED PRODUCTS. COORDINATE THE SUBMISSION OF DOCUMENTS OR SAMPLES REQUIRED IN ACCORDANCE WITH WORK AND CONTRACTUAL DOCUMENTS REQUIREMENTS. IDENTIFY ADEQUATELY ALL DOCUMENTS SUBMITTED.
5. THE DESIGNER/CONSULTANTS WILL REVIEW THE SHOP DRAWINGS ONLY TO ENSURE THEIR COMPLIANCE WITH THE GENERAL CONCEPT. THE CONTRACTOR WHO SUBMITS THE SHOP DRAWINGS REMAINS THE SOLE PERSON RESPONSIBLE. SUCH REVIEW DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PREVENT ANY ERROR OR OMISSION ON THE SHOP DRAWINGS OR TO COMPLY WITH CONSTRUCTION AND CONTRACTUAL DOCUMENT REQUIREMENTS. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, THE CONTRACTOR IS RESPONSIBLE FOR THE DIMENSIONS TO BE CONFIRMED AND CORRELATED ON THE SITE, THE MANUFACTURING PROCEDURES OR THE CONSTRUCTION AND INSTALLATION TECHNIQUES AS WELL AS THE COORDINATION OF THE WORK WITH ALL SUB–CONTRACTORS.

01.3 - CUTTING, DRILLING AND PATCHING

1. NO DRILLING IS TO BE PERFORMED WITHOUT THE OWNER'S AUTHORIZATION.
2. CUT RIGID MATERIALS WITH A MASONRY SAW OR A CORE DRILL. IT IS FORBIDDEN TO USE PNEUMATIC OR HAMMER TOOLS ON MASONRY OR CEMENT STRUCTURES WITHOUT PRIOR AUTHORIZATION.
3. REPAIR ALL WORK WITH NEW PRODUCTS, PURSUANT TO CONTRACTUAL DOCUMENT REQUIREMENTS.
4. ADJUST THE CONSTRUCTION TIGHTLY AROUND CONDUITS, COUPLERS, AIR AND ELECTRICAL DUCTS AS WELL AS OTHER ELEMENTS TRAVERSING WALL, CEILING OR FIRE RATED FLOOR OPENINGS. SEAL COMPLETELY THE SPACES AROUND OPENINGS WITH FIRE STOPPING OR ACOUSTIC MATERIALS DEPENDING ON THEIR LOCATION.
5. FINISH SURFACES TO ENSURE UNIFORMITY WITH ADJACENT FINISH COATINGS. FINISH CONTINUOUS SURFACES UP TO THE CLOSEST INTERSECTION BETWEEN TWO ELEMENTS AND REFINISH COMPLETELY WHEN THERE IS A GROUPING OF ELEMENTS.
6. SEAL THE OPENINGS, INCLUDING CONCEALED SPACE OPENINGS, AND PATCH SURFACES AS PER EXISTING AFTER THE ENTIRETY OF THE WORK, INCLUDING, BUT WITHOUT LIMITATION, DEMOLITION, ELECTRICAL AND MECHANICAL WORK.
7. FLOOR PREPARATION: SMOOTH UNEVENNESS OF SUB–FLOOR; FILL DENTS, CRACKS, JOINTS, HOLES AND OTHER DEFECTS WITH FILL MATERIAL USING A TROWEL OR FLOAT FOR A SINGLE LEVEL, HARD AND EVEN SURFACE; RESTRICT ACCESS UNTIL FILL MATERIAL HAS HARDENED AND DRIED.

01.4 - DEMOLITION

1. TAKE ALL PROTECTIVE MEASURES NECESSARY TO KEEP ANY TRACE OF DUST OR DEBRIS INCIDENTAL TO THE WORK FROM AREAS ADJACENT TO THE WORK, INCLUDING STAIRCASES AND CORRIDORS. PROTECT ALL FINISHES OF ADJACENT AREAS LIKELY TO BE AFFECTED BY THE WORK ALONG WITH FINISHES AND ELEMENTS TO BE PRESERVED WITHIN WORKING AREAS. PATCH ALL SURFACES DAMAGED BY THE DEMOLITION WORK TO PROVIDE A CONTINUOUS SURFACE OVERALL. PROTECTION METHODS ARE TO BE APPROVED BY THE OWNER.
2. LIMIT ACTIVITIES TO WORKING AREAS ONLY.
3. PERFORM WORK IN COMPLIANCE WITH CSST REGULATIONS.
4. DISMANTLE AND DELIVER TO THE OWNER ALL MATERIALS AS IDENTIFIED TO BE RETURNED TO THE OWNER OR TO BE REUSED.
5. REMOVE ALL SECONDARY ELEMENTS RELATING TO ELEMENTS TO BE DEMOLISHED INCLUDING BUT WITHOUT LIMITATION TO CONNECTIONS, ANCHORS, HANGER RODS, STRUCTURAL, MECHANICAL AND ELECTRICAL ELEMENTS. KEEP ELEMENTS TO BE PRESERVED FREE OF ANY OBSOLETE COMPONENT.
6. DISPOSE OF WASTES AT THE END OF EACH WORKING DAY AND UPON COMPLETION OF THE WORK. THE WORKING AREA IS TO BE KEPT CLEAN AND ORDERLY TO THE OWNER'S SATISFACTION.

03.1 -CONCRETE

1. EXTERIOR CONCRETE SIDEWALK TO BE CONSTRUCTED TO LOCAL CODES, BY LAWS AND PRACTICES. COMPACT SUBGRADE AND GRANULAR MATERIAL TO 95% STANDARD PROCTOR DENSITY.

04.1 - MASONRY

1. SCOPE OF WORK:
   AS INDICATED, SUPPLY AND INSTALL NEW CONC. MASONRY UNIT TO MATCH EXISTING NEIGHBOURING PORTION.
2. REFERENCE STANDARDS: EXECUTE MASONRY WORK IN COMPLIANCE WITH CAN3–A370 AND CAN3–A371 STANDARDS. PREPARE MASONRY MORTAR AND GROUT IN COMPLIANCE WITH CSA A179 STANDARDS.
3. TO MATCH EXISTING.
4. REINFORCEMENT AND ANCHORAGE:
   –VERTICAL REINFORCEMENT: CALCULATE VERTICAL REINFORCEMENT IN COMPLIANCE WITH CNB REQUIREMENTS AND CSA S302.1–94 STANDARD.
   –ANCHORS TO STRUCTURAL COLUMNS FOR CONCRETE BLOCK MASONRY: ALLOWING FOR CONTROLLED MOVEMENTS; REFERENCE PRODUCT, D/A2200 BY DUR–O–WAL OR APPROVED EQUIVALENT. ANCHOR BLOCK WALLS TO COLUMNS WITH ANCHORS SCREWED TO THE LATTER EVERY 405mm.
   –REINFORCEMENT AND ANCHORAGE MATERIALS: HOT–DIP GALVANIZED STEEL (460 G/M2) EXCEPTED FOR REINFORCEMENT BARS.

05.1 - METALS

1. SHOP DRAWINGS FOR ALL METAL FABRICATIONS TO BEAR STAMP OF A PROFESSIONAL ENGINEER LICENSED IN ONTARIO.
2. METAL PAINT COLOUR TO MATCH EXISTING BUILDING MATERIALS. CONTRACTOR TO SUBMIT SAMPLES.
3. USE SELF–TAPPING SHAKE–PROOF FLAT HEADED SCREWS ON ITEMS REQUIRING ASSEMBLY BY SCREWS OR AS INDICATED.
4. WHERE POSSIBLE, FIT AND ASSEMBLE WORK, READY FOR ERECTION.
5. ENSURE EXPOSED WELDS ARE CONTINUOUS FOR LENGTH OF EACH JOINT. FILE OR GRIND EXPOSED WELDS SMOOTH AND FLUSH.
6. PERFORM CLEANING AFTER INSTALLATION TO REMOVE CONSTRUCTION AND ACCUMULATED DIRT.

05.2 - FLASHINGS AND SHEET METAL FABRICATION

1. PROJECT INCLUDES:
   –EXTERIOR WALL FLASHING
2. SUBMIT DUPLICATE SAMPLES OF THE SHEET METAL MATERIALS IN THE COLOUR PROPOSED FOR USE.
3. EXPOSED SHEET METAL FLASHING AND TRIMS:
   –ZINC COATED STEEL: COMMERCIAL QUALITY TO ASTM A526M/A653/A653M, Z275 HOT–DIP GALVANIZED, REGULAR SPANGLE SURFACE, 1.0mm THICKNESS (20ga)
4. CONCEALED FLASHING:
   –FLEXIBLE SHEET MEMBRANE FLASHING: NONREINFORCED FLEXIBLE BLACK ELASTIC SHEET, 1.3 TO 1.7mm (50 TO 65 mils) THICK, EPDM SYNTHETIC RUBBER SHEET.
5. FABRICATE METAL FLASHINGS AND OTHER SHEET METAL WORK AS INDICATED AND AS REQUIRED FOR A COMPLETE INSTALLATION. FORM PIECES IN MAX. 2440mm LENGTHS AND MAKE ALLOWANCE FOR EXPANSION AT JOINTS.
6. COUNTERFLASH ALL MEMBRANE FLASHINGS FORM AND FOLD ALL JOINTS, SEAMS AND EDGES. LOCK AND CAULK; SEAL PERIMETER OF FLASHING AT JUNCTION WITH OTHER MATERIALS.
7. EXPOSED SEALANT: ONE COMPONENT POLYURETHANE COLOUR TO MATCH FLASHING.

07.1 - THERMAL AND MOISTURE PROTECTION

1. PATCH, REPAIR AND PROVIDE NEW WATERPROOFING WHERE NECESSARY AS IDENTIFIED ON DRAWINGS.
2. REFERENCES: AMERICAN SOCIIETY FOR TESTING AND MATERIALS INTERNATIONAL (ASTM) C553–02 SPECIFICATION FOR MINERAL FIBRE BLANKET THERMAL INSULATION FOR COMMERCIAL AND INDUSTRIAL APPLICATIONS, ASTM C1320–99 STANDARD PRACTICE FOR INSTALLATION OF MINERAL FIBRE BALL AND BLANKET THERMAL INSUALTION FOR LIGHT FRAME CONSTRUCTION. CANADIAN STANDARDS ASSOCIATION (CSA INTERNATIONAL) CSA B111–1974(R1998), WIRE NAILS, SPIKES AND STAPLES. UNDERWRITERS LABORATORIES OF CANADA (ULC) CAN/ULC–S702–1997, STANDARD FOR MINERAL FIBRE INSULATION.
3. INTERIOR PARTITIONS: SAFB (SOUND ATTENUATION FIRE BLANKET) ROXUL SAFE' N' SOUND.
4. INSTALL INSULATION TO MAINTAIN CONTINUITY OF THERMAL PROTECTION TO BUILDING ELEMENTS AND SPACES.
5. INSTALL INSULATION WITH FACTORY APPLIED AIR/VAPOUR BARRIER MEMBRANE FACING WARM SIDE OF BUILDING SPACES: LAB ENDS AND SIDE FLANGES OF MEMBRANE OVER FRAMING MEMBRANES. RETAIN IN POSITION WITH INSULATION CLIPS INSTALLED AS RECOMMENDED BY MANUFACTURER. TAPE SEAL BUTT ENDS AND LAPPED SIDE FLANGES. DO NOT TEAR OR CUT MEMBRANE.
6. FIT INSULATION CLOSELY AROUND ELECTRICAL BOXES, PIPES, DUCTS, FRAMES AND OTHER OBJECTS IN OR PASSING THROUGH INSULATION.
7. DO NOT COMPRESS INSULATION TO FIT INTO SPACES.
8. KEEP INSULATION MINIMUM 75mm FROM HEAT EMITTING DEVICES SUCH AS RECESSED LIGHT FIXTURES.

07.2 - FIRE RETARDANT SEALANTS

1. –PENETRATIONS THROUGH FIRE RESISTANCE RATED MASONRY, CONCRETE AND GYPSUM BOARD PARTITIONS AND WALLS.
   –TOP OF FIRE RESISTANCE RATED MASONRY AND GYPSUM BOARD PARTITIONS.
   –INTERSECTION OF FIRE RESISTANCE RATED MASONRY AND GYPSUM BOARD PARTITIONS.
   –CONTROL AND SWAY JOINTS IN FIRE RESISTANCE RATED MASONRY AND GYPSUM BOARD PARTITIONS AND WALLS.
   –PENETRATIONS THROUGH FIRE RESISTANCE RATED FLOOR AND CEILING SLABS.
   –OPENING AND SLEEVES INSTALLED FOR FUTURE USE THROUGH FIRE SEPARATIONS.
   –AROUND MECHANICAL AND ELECTRICAL ASSEMBLIES PENETRATING FIRE SEPARATIONS.
2. INSTALL FIRE RETARDANT AND SMOKE CAULKING MATERIAL AND COMPONENTS IN COMPLIANCE WITH ULC CERTIFICATION AND MANUFACTURER'S INSTRUCTIONS.
3. FIRE RETARDANT AND SMOKE BLOCKING SYSTEMS: IN COMPLIANCE WITH CAN4–S115 STANDARD
4. ELEMENT OF COMPOSITE MATERIALS BY TECHNICAL CONDUITS TO BE TRAVERSED: ULC CERTIFIED IN COMPLIANCE WITH CAN4–S115 STANDARD AND LISTED IN ULC GUIDE NO. 40U19.15 AND 40U19 UNDER THE LABEL SERVE OF ULC.
5. FIRE RETARDANT AND SMOKE SEALS AT OPENINGS INTENDED FOR EASE OF RE–ENTRY: ELASTOMERIC SEAL. NEITHER USE CEMENTING MATERIAL JOINTS NOR RIGID JOINTS AT SUCH LOCATIONS.
6. FIRE RETARDANT AND SMOKE SEALS AT OPENINGS AROUND PENETRATIONS FOR PIPES, DUCTWORK AND OTHER MECHANICAL ITEMS REQUIRING SOUND AND VIBRATION CONTROL: ELASTOMERIC SEAL. NEITHER USE CEMENTING MATERIAL JOINTS NOR RIGID JOINTS AT SUCH LOCATIONS.
7. FIRE RETARDANT AND SMOKE SEALS FOR JOINTS BETWEEN TOP OF GYPSUM OR CONCRETE PARTITIONS AND DECKING OR SUPERIOR SLAB: ULC CERTIFIED SYSTEMS PURSUANT TO HW21, HW22, HW23 OR HW24 TRIALS AND MADE OF THE FOLLOWING ELEMENTS:
   –MINERAL WOOL, 128KG/M3 DENSITY
   –LIQUID VAPOURIZING FIRE RESISTANT LEVELING COAT, WATER–BASED, SUCH AS FIREDAM SPRAY BY 3M OR APPROVED EQUIVALENT.
8. PRIMERS: SPECIFIC TO MANUFACTURER'S RECOMMENDATIONS.

07.3 - SEALANTS

1. SEALANTS FOR WALLS, OTHER THAN GYPSUM BOARD WALLS, WITHOUT FIRE OR SMOKE RESISTANCE OR ACOUSTIC PROPERTIES; SINGLE–COMPONENT, ELASTOMERIC, CHEMICAL POLYMERIZATION, IN COMPLIANCE WITH CAN/CGSB–19.13 STANDARD. REFERENCE PRODUCT: DYMONIC BY TREMCO OR APPROVED EQUIVALENT.
2. SEALANTS FOR GYPSUM BOARD SURFACES, WITHOUT FIRE OR SMOKE RESISTANCE OR ACOUSTIC PROPERTIES: SINGLE–COMPONENT, LATEX EMULSION–BASED WITH ACRYLIC RESINS, IN COMPLIANCE WITH CAN/CGSB–19.17 STANDARD.
3. SEALANTS FOR BUILT–IN FURNITURE AND WALL JUNCTIONS: SINGLE COMPONENT, SILICON–BASED IN COMPLIANCE WITH CAN/CGSB–19.22 STANDARD.

08.1 - STEEL DOORS, FRAMES AND SCREENS

1. DOOR CORE MATERIALS
   .1 HONEYCOMB CONSTRUCTION: STRUCTURAL SMALL CELL, 24.5 MM MAXIMUM KRAFT PAPER 'HONEYCOMB', WEIGHT: 36.3 KG PER REAM MINIMUM, DENSITY: 16.5 KG/M3 MINIMUM SANDED TO REQUIRED THICKNESS.
   .2 STIFFENED: FACE SHEETS LAMINATED WELDED, HONEYCOMB UNINSULATED INSULATED CORE.
   .3 FIBREGLASS: TO CAN/ULC_S702, SEMI_RIGID TYPE, DENSITY 24 KG/M3.
   .4 EXPANDED POLYSTYRENE: CAN/ULC_S701, DENSITY 16 TO 32 KG/M3; SELF–EXTINGUISHING, NON–TOXIC.
   .5 POLYURETHANE: TO CAN/ULC_S704 RIGID, MODIFIED POLYISOCYANURATE, CLOSED CELL BOARD; DENSITY 32 KG/M3.
   .6 TEMPERATURE RISE RATED (TRR): CORE COMPOSITION TO LIMIT TEMPERATURE RISE ON UNEXPOSED SIDE OF DOOR TO 250OC AT 30 60 MINUTES. CORE TO BE TESTED AS PART OF A COMPLETE DOOR ASSEMBLY, IN ACCORDANCE WITH CAN4_S104, ASTM E152 OR NFPA 252, COVERING STANDARD METHOD OF TESTS OF DOOR ASSEMBLIES AND LISTED BY NATIONALLY RECOGNIZED TESTING AGENCY HAVING FACTORY INSPECTION SERVICE.
2. ADHESIVES
   .1 HONEYCOMB CORES AND STEEL COMPONENTS: HEAT RESISTANT, SPRAY GRADE, RESIN REINFORCED NEOPRENE/RUBBER (POLYCHLOROPRENE) BASED, LOW VISCOSITY, CONTACT CEMENT.
   .2 POLYSTYRENE AND POLYURETHANE CORES: HEAT RESISTANT, EPOXY RESIN BASED, LOW VISCOSITY, CONTACT CEMENT.
   .3 LOCK_SEAM DOORS: FIRE RESISTANT, RESIN REINFORCED POLYCHLOROPRENE, HIGH VISCOSITY, SEALANT/ADHESIVE.
3. PRIMER
   .1 TOUCH_UP PRIME CAN/CGSB_1.181.
4. PAINT
   .1 FIELD PAINT STEEL DOORS AND FRAMES IN ACCORDANCE WITH EXTERIOR PAINTING AND OR EXTERIOR PAINTING INSTRUCTIONS. PROTECT WEATHERSTRIPS FROM PAINT. PROVIDE FINAL FINISH SHALL BE FREE OF SCRATCHES OR OTHER BLEMISHES.
5. ACCESSORIES
   .1 DOOR SILENCERS: SINGLE STUD RUBBER/NEOPRENE TYPE.
   .2 EXTERIOR AND INTERIOR TOP AND BOTTOM CAPS: STEEL.
   .3 FABRICATE GLAZING STOPS AS FORMED CHANNEL, MINIMUM 16 MM HEIGHT, ACCURATELY FITTED, BUTTED AT CORNERS AND FASTENED TO FRAME SECTIONS WITH COUNTER_SUNK OVAL HEAD SHEET METAL SCREWS.
   .4 DOOR BOTTOM SEAL: REFER TO SECTION 08 71 10 DOOR HARDWARE AND HARDWARE SCHEDULE.
   .5 METALLIC PASTE FILLER: TO MANUFACTURER'S STANDARD.
   .6 FIRE LABELS: METAL RIVETED.
   .7 SEALANT: TO SEALANT SECTION
   .8 GLAZING: TO GLAZING SECTION
   .9 MAKE PROVISIONS FOR GLAZING AS INDICATED AND PROVIDE NECESSARY GLAZING STOPS.
   .10 DESIGN EXTERIOR GLAZING STOPS TO BE TAMPERPROOF.
6. FRAMES FABRICATION GENERAL
   .1 FABRICATE FRAMES IN ACCORDANCE WITH CSDMA SPECIFICATIONS.
   .2 FABRICATE FRAMES TO PROFILES AND MAXIMUM FACE SIZES AS INDICATED.
   .3 EXTERIOR FRAMES: 1.6MM (16 GA) WELDED, THERMALLY BROKEN TYPE CONSTRUCTION.
   .4 INTERIOR FRAMES: 1.2MM (18GA) WELDED TYPE CONSTRUCTION.
   .5 BLANK, REINFORCE, DRILL AND TAP FRAMES FOR MORTISED, TEMPLATED HARDWARE, AND ELECTRONIC HARDWARE USING TEMPLATES PROVIDED BY FINISH HARDWARE SUPPLIER. REINFORCE FRAMES FOR SURFACE MOUNTED HARDWARE.
   .6 PREPARE FRAME FOR DOOR SILENCERS, THREE (3) FOR SINGLE DOOR; TWO (2) AT HEAD FOR DOUBLE DOOR.
   .7 MANUFACTURER'S NAMEPLATES ON FRAMES AND SCREENS ARE NOT PERMITTED.
   .8 CONCEAL FASTENINGS EXCEPT WHERE EXPOSED FASTENINGS ARE INDICATED.
   .9 PROVIDE FACTORY_APPLIED TOUCH UP PRIMER AT AREAS WHERE ZINC COATING HAS BEEN REMOVED DURING FABRICATION.
   .10 INSULATE EXTERIOR FRAME COMPONENTS WITH POLYURETHANE INSULATION.
7. FRAME ANCHORAGE
   .1 PROVIDE APPROPRIATE ANCHORAGE TO FLOOR AND WALL CONSTRUCTION.
   .2 LOCATE EACH WALL ANCHOR IMMEDIATELY ABOVE OR BELOW EACH HINGE REINFORCEMENT ON HINGE JAMB AND DIRECTLY OPPOSITE ON STRIKE JAMB.
   .3 PROVIDE TWO (2) ANCHORS FOR REBATE OPENING HEIGHTS UP TO 1520 MM AND 1 ADDITIONAL ANCHOR FOR EACH ADDITIONAL 760 MM OF HEIGHT OR FRACTION THEREOF.
   .4 LOCATE ANCHORS FOR FRAMES IN EXISTING OPENINGS NOT MORE THAN 150 MM FROM TOP AND BOTTOM OF EACH JAMBS AND INTERMEDIATE AT 660 MM O.C. MAXIMUM.
8. FRAMES: WELDED TYPE
   .1 WELDING IN ACCORDANCE WITH CSA W59.
   .2 ACCURATELY MITRE OR MECHANICALLY JOINT FRAME PRODUCT AND SECURELY WELD ON INSIDE OF PROFILE.
   .3 COPE ACCURATELY AND SECURELY WELD BUTT JOINTS OF MULLIONS, TRANSOM BARS, CENTRE RAILS AND SILLS.
   .4 GRIND WELDED JOINTS AND CORNERS TO A FLAT PLANE; FILL WITH METALLIC PASTE AND SAND TO UNIFORM SMOOTH FINISH.
   .5 SECURELY ATTACH FLOOR ANCHORS TO INSIDE OF EACH JAMB PROFILE.
   .6 WELD IN 2 TEMPORARY JAMB SPREADERS PER FRAME TO MAINTAIN PROPER ALIGNMENT DURING SHIPMENT.
   .7 FABRICATE FRAME PRODUCTS FOR OPENINGS IN GLAZED SCREENS IN MANAGEABLE SECTIONS, SPLICE JOINTS FOR FIELD ASSEMBLY.
   .8 SECURELY ATTACH LEAD TO INSIDE OF FRAME PROFILE FROM RETURN TO JAMB SOFFIT (INCLUSIVE) ON DOOR SIDE OF FRAME ONLY.
9. DOOR FABRICATION GENERAL
   .1 DOORS: SWING TYPE, FLUSH, WITH PROVISION FOR GLASS AND/OR LOUVER OPENINGS AS INDICATED.
   .2 EXTERIOR DOORS: HOLLOW STEEL CONSTRUCTION. INTERIOR DOORS: HOLLOW STEEL CONSTRUCTION.
   .3 FABRICATE DOORS WITH LONGITUDINAL EDGES WELDED. SEAMS: GRIND WELDED JOINTS TO A FLAT PLANE, FILL WITH METALLIC PASTE FILLER AND SAND TO A UNIFORM SMOOTH FINISH.
   .4 DOORS: MANUFACTURERS' PROPRIETARY CONSTRUCTION; TESTED AND/OR ENGINEERED AS PART OF A FULLY OPERABLE ASSEMBLY, INCLUDING DOOR, FRAME, GASKETING AND HARDWARE IN ACCORDANCE WITH ASTM E330.
   .5 BLANK, REINFORCE, DRILL DOORS AND TAP FOR MORTISED, TEMPLATED HARDWARE AND ELECTRONIC HARDWARE.
   .6 FACTORY PREPARE HOLES 12.7 MM DIAMETER AND LARGER EXCEPT MOUNTING AND THROUGH_BOLT HOLES, ON SITE, AT TIME OF HARDWARE INSTALLATION.
   .7 REINFORCE DOORS WHERE REQUIRED, FOR SURFACE MOUNTED HARDWARE. PROVIDE FLUSH STEEL TOP CAPS TO EXTERIOR DOORS. PROVIDE INVERTED, RECESSED, SPOT WELDED CHANNELS TO TOP AND BOTTOM OF INTERIOR DOORS.
   .8 PROVIDE FACTORY_APPLIED TOUCH_UP PRIMER AT AREAS WHERE ZINC COATING HAS BEEN REMOVED DURING FABRICATION.
   .9 PROVIDE FIRE LABELLED DOORS FOR THOSE OPENINGS REQUIRING FIRE PROTECTION RATINGS, AS SCHEDULED. TEST SUCH PRODUCTS IN STRICT CONFORMANCE WITH CAN4_S104, ASTM E152 OR NFPA 252 AND LIST BY NATIONALLY RECOGNIZED AGENCY HAVING FACTORY INSPECTION SERVICE AND CONSTRUCT AS DETAILED IN FOLLOW_UP SERVICE PROCEDURES/FACTORY INSPECTION MANUALS ISSUED BY LISTING AGENCY TO INDIVIDUAL MANUFACTURERS.
   .10 MANUFACTURER'S NAMEPLATES ON DOORS ARE NOT PERMITTED.
10. HOLLOW STEEL CONSTRUCTION
   .1 FORM EACH FACE SHEET FOR EXTERIOR DOORS FROM 1.2MM (18GA) SHEET STEEL.
   .2 FORM EACH FACE SHEET FOR INTERIOR DOORS FROM 1.2MM (18 GA) SHEET STEEL.
   .3 REINFORCE DOORS WITH VERTICAL STIFFENERS, SECURELY WELDED OR LAMINATED TO EACH FACE SHEET AT 150 MM ON CENTRE MAXIMUM.
   .4 FILL VOIDS BETWEEN STIFFENERS OF EXTERIOR DOORS WITH FIBREGLASS, POLYSTYRENE OR POLYURETHANE CORE.
   .5 FILL VOIDS BETWEEN STIFFENERS OF INTERIOR DOORS WITH FIBREGLASS, HONEYCOMB OR TEMPERATURE RISE RATED CORE.
11. THERMALLY BROKEN DOORS AND FRAMES
   .1 FABRICATE THERMALLY BROKEN DOORS BY USING INSULATED CORE AND SEPARATING EXTERIOR PARTS FROM INTERIOR PARTS WITH CONTINUOUS INTERLOCKING THERMAL BREAK.
   .2 THERMAL BREAK: RIGID POLYVINYLCHLORIDE EXTRUSION CONFORMING TO CGSB 41_GP_19MA.
   .3 FABRICATE THERMALLY BROKEN FRAMES SEPARATING EXTERIOR PARTS FORM INTERIOR PARTS WITH CONTINUOUS INTERLOCKING THERMAL BREAK.
   .4 APPLY INSULATION.

08.2 -ALUMINUM DOORS AND FRAMES

1. ENTRANCE PERFORMANCE REQUIREMENTS:
   .1 AIR INFILTRATION: FOR BUTT HUNG ENTRANCES IN THE CLOSED AND LOCKED POSITION, THE TEST SPECIMEN SHALL BE TESTED IN ACCORDANCE WITH ASTM E 283 AT A PRESSURE DIFFERENTIAL OF 6.24 PSF (300 PA) FOR SINGLE DOORS AND 1.567 PSF (75 PA) FOR PAIR OF DOORS. A SINGLE 915 X 2134MM ENTRANCE DOOR AND FRAME SHALL NOT EXCEED 0.50 CFM PER SQUARE FOOT. A PAIR OF 1830 X 2134MM ENTRANCE DOORS AND FRAME SHALL NOT EXCEED 1.0 CFM PER SQUARE FOOT.
   .2 STRUCTURAL: CORNER STRENGTH SHALL BE TESTED PER THE MANUFACTURER'S DUAL MOMENT LOAD TEST PROCEDURE AND CERTIFIED BY AN INDEPENDENT TESTING LABORATORY TO ENSURE WELD COMPLIANCE AND CORNER INTEGRITY TESTING PROCEDURE AND CERTIFIED TEST RESULTS AVAILABLE UPON REQUEST.
   .3 THERMAL PERFORMANCE: TEST ENTRANCE SHALL CONSIST OF A SINGLE 915 X 2134MM DOOR GLAZED WITH 25.4MM THICK INSULATED GLASS AND HUNG IN A FRAME.
   .4 THERMAL TRANSMITTANCE COEFFICIENT (U–FACTOR): WHEN TESTED TO ASTM C236 AND AAMA SPECIFICATION 1503, THE CONDUCTIVE THERMAL TRANSMITTANCE (U–FACTOR) SHALL NOT BE MORE THAN 0.72 BTU/HR/SF/°F.
2. DESIGN CRITERIA:
   .1 DESIGN FRAMES AND DOORS IN EXTERIOR WALLS TO:
      .1 ACCOMMODATE EXPANSION AND CONTRACTION WITHIN SERVICE TEMPERATURE RANGE OF _35 TO +35 DEGREES C.
      .2 LIMIT DEFLECTION OF MULLIONS TO MAXIMUM 1/175TH OF CLEAR SPAN WHEN TESTED TO ASTM E330 UNDER WIND LOAD OF 1.2 KPA SUBMIT CERTIFICATE OF TESTS PERFORMED
      .3 MOVEMENT WITHIN SYSTEM.
      .4 MOVEMENT BETWEEN SYSTEM AND PERIMETER FRAMING COMPONENTS OR SUBSTRATE.
   .2 SIZE GLASS THICKNESS AND GLASS UNIT DIMENSIONS TO LIMITS IN ACCORDANCE WITH CAN/CGSB–12.20.
   .3 PROVIDE CONTINUOUS AIR BARRIER AND VAPOUR RETARDER THROUGH DOOR SYSTEM. PRIMARILY IN LINE WITH INSIDE PANE OF GLASS AND HEEL BEAD OF GLAZING COMPOUND.
3. ACCEPTABLE PRODUCTS: KAWNEER 260 NARROW STILE INSULCLAD THERMAL ENTRANCE OR EQUIVALENT. COLOUR TO MATCH EXISTING W/ KAWNEER TRIFAB 451 UT FRAMES.

08.3 -ALUMINUM WINDOWS

1. SYSTEM DESCRIPTION / SYSTEM PERFORMANCE REQUIREMENTS:
   .1 WIND LOADS: PROVIDE WALL SYSTEM; INCLUDE ANCHORAGE, CAPABLE OF WITHSTANDING WIND LOAD DESIGN PRESSURES FOR THE OTTAWA–CARLETON REGION. THE DESIGN PRESSURES SHALL BE BASED ON THE 2005 BUILDING CODE.
   .2 AIR INFILTRATION: THE TEST SPECIMEN SHALL BE TESTED IN ACCORDANCE WITH ASTM E 283. AIR INFILTRATION RATE SHALL NOT EXCEED 0.06 CFM/FT2 (0.3 L/S · M2) AT A STATIC AIR PRESSURE DIFFERENTIAL OF 6.24 PSF (300 PA).
   .3 WATER RESISTANCE, (STATIC): THE TEST SPECIMEN SHALL BE TESTED IN ACCORDANCE WITH ASTM E 331. THERE SHALL BE NO LEAKAGE AT A STATIC AIR PRESSURE DIFFERENTIAL OF 12 PSF (575 PA) AS DEFINED IN AAMA 501.
   .4 WATER RESISTANCE, (DYNAMIC): THE TEST SPECIMEN SHALL BE TESTED IN ACCORDANCE WITH AAMA 501.1. THERE SHALL BE NO LEAKAGE AT AN AIR PRESSURE DIFFERENTIAL OF 12 PSF (575 PA) AS DEFINED IN AAMA 501.
   .5 UNIFORM LOAD: A STATIC AIR DESIGN LOAD OF 40 PSF (1915 PA) SHALL BE APPLIED IN THE POSITIVE AND NEGATIVE DIRECTION IN ACCORDANCE WITH ASTM E 330. THERE SHALL BE NO DEFLECTION IN EXCESS OF L/175 OF THE SPAN OF ANY FRAMING MEMBER AT DESIGN LOAD. AT STRUCTURAL TEST LOAD EQUAL TO 1.5 TIMES THE SPECIFIED DESIGN LOAD, NO GLASS BREAKAGE OR PERMANENT SET IN THE FRAMING MEMBERS IN EXCESS OF 0.2% OF THEIR CLEAR SPANS SHALL OCCUR.
   .6 SEISMIC: WHEN TESTED TO AAMA 501.4, SYSTEM MUST MEET DESIGN DISPLACEMENT OF 0.010 X THE STORY HEIGHT AND ULTIMATE DISPLACEMENT OF 1.5 X THE DESIGN DISPLACEMENT.
   .7 THERMAL TRANSMITTANCE (U–FACTOR): WHEN TESTED TO AAMA SPECIFICATION 1503, THE THERMAL TRANSMITTANCE (U–FACTOR) SHALL NOT BE MORE THAN: 0.66 (CLEAR).
   .8 CONDENSATION INDEX (I): WHEN TESTED TO CSA–A440–00, THE CONDENSATION INDEX SHALL NOT BE LESS THAN 68FRAME AND 54GLASS (CLEAR).
   .9 THERMAL TRANSMITTANCE (U–FACTOR): WHEN TESTED TO AAMA SPECIFICATION 1503, THE THERMAL TRANSMITTANCE (U–FACTOR) SHALL NOT BE MORE THAN: 0.43 (LOW–E).
   .10 CONDENSATION RESISTANCE (CRF): WHEN TESTED TO AAMA SPECIFICATION 1503, THE CONDENSATION RESISTANCE FACTOR SHALL NOT BE LESS THAN 71FRAME AND 71GLASS (LOW–E).
   .11 SOUND TRANSMISSION LOSS: WHEN TESTED TO ASTM E90 AND ASTM E1425, THE SOUND TRANSMISSION CLASS (STC) AND OUTDOOR/INDOOR TRANSMISSION CLASS (OITC) SHALL NOT BE LESS THAN:
      .1 STC 31 OR OITC 26 BASED UPON 1" INSULATING GLASS (1/4", 1/2" AS, 1/4"),
      .2 STC 37 OR OITC 30 BASED UPON 1" LAMINATED GLASS (1/4" LAMINATED, 1/2" AS, 1/4" LAMINATED).
   .2 ACCEPTABLE MANUFACTURERS: KAWNEER 518 ISOPORT OR PREAPPROVED EQUIVALENT. COLOUR TO MATCH EXISTING.

08.4 -GLAZING

1. MATERIALS: FLAT GLASS
2. WIRED GLASS (WG): TO CAN/CGSB_12.11, WIRED SAFETY GLASS, 13 MM THICK.
   .1 TYPE 1 – POLISHED B.S. (TRANSPARENT)
   .2 WIRE MESH STYLES – 2 SQUARE
3. MATERIALS: SEALED INSULATING GLASS (IGU)
   .1 INSULATING GLASS UNITS: TO CAN/CGSB_12.8, DOUBLE UNIT, 25 MM OVERALL THICKNESS.
      .1 GLAZED WINDOW SYSTEM:
         .1 GLASS: TO CAN/CGSB_12.3, CAN/CGSB_12.1, CAN/CGSB_12.2, CAN/CGSB_12.4 AND CAN/CGSB_12.10.
         .2 GLASS THICKNESS: 6 MM EACH LIGHT
         .3 INTER_CAVITY SPACE THICKNESS: ARGON–FILLED, 13 MM WITH LOW CONDUCTIVITY SPACERS.
         .4 GLASS COATING: LOW "E".
      .2 ALUMINUM DOORS & FRAMES:
         .1 GLASS: TO CAN/CGSB_12.3, CAN/CGSB_12.1, CAN/CGSB_12.2, CAN/CGSB_12.4 AND CAN/CGSB_12.10.
         .2 GLASS THICKNESS: 6 MM EACH LIGHT
         .3 INTER_CAVITY SPACE THICKNESS: ARGON–FILLED, 13 MM WITH LOW CONDUCTIVITY SPACERS.
         .4 GLASS COATING: LOW "E".
4. ACCESSORIES
   .1 SETTING BLOCKS: NEOPRENE, 80_90 SHORE A DUROMETER HARDNESS TO ASTM D2240, TO SUIT GLAZING METHOD, GLASS LIGHT WEIGHT AND AREA.
   .2 SPACER SHIMS: NEOPRENE, 50_60 SHORE A DUROMETER HARDNESS TO ASTM D2240, 75 MM LONG X ONE HALF HEIGHT OF GLAZING STOP X THICKNESS TO SUIT APPLICATION; SELF–ADHESIVE ON ONE FACE.
   .3 GLAZING TAPE:
      .1 PREFORMED BUTYL COMPOUND WITH INTEGRAL RESILIENT TUBE SPACING DEVICE, 10_15 SHORE A DUROMETER HARDNESS TO ASTM D2240; COILED ON RELEASE PAPER; BLACK COLOUR.
   .4 GLAZING CLIPS: MANUFACTURER'S STANDARD TYPE.
      .1 LOCK_STRIP GASKETS: TO ASTM C542.

08.5 - HARDWARE

2. REFERENCE STANDARDS: STANDARD POSITION OF HARDWARE MUST MEET REQUIREMENTS OF THE CANADIAN METRIC GUIDE FOR STEEL DOORS AND FRAMES (MODULAR CONSTRUCTION) PREPARED BY THE CANADIAN STEEL DOOR AND FRAME MANUFACTURERS ASSOCIATION.
3. TECHNICAL DATA SHEETS: SUBMIT FOR APPROVAL HARDWARE LIST, INCLUDING BRAND, MODEL, MATERIAL, FUNCTION, FINISH AND ANY OTHER RELEVANT INFORMATION.
4. WARRANTY: PROVIDE A CERTIFICATE, SIGNED AND IN THE NAME OF THE OWNER, GUARANTEEING THAT THE WORK OF THIS SECTION IS TO REMAIN FREE OF ANY DEFECT FOR A PRIOR OF TWO (2) YEARS, EXCEPT IF INDICATED, FOUR (4) YEARS FOR LOCKS AND FIVE (5) YEARS FOR DOOR CLOSURES.
5. THE HARDWARE LIST IS PROVIDED TO HELP ESTABLISH THE TYPE, FUNCTION, QUALITY AND MINIMAL WEIGHT OF THE ITEMS REQUIRED, BUT IS NOT TO BE INTERPRETED AS A LIST OF QUANTITY. THE CONTRACTOR MUST VERIFY THE LIST AND THE PLANS AND PROVIDE ANY ADDITIONAL HARDWARE ITEM THAT IS NOT IN THE LIST BUT THAT IS REQUIRED TO COMPLETE DOOR INSTALLATION.
6. USE HARDWARE CERTIFIED AND LABELLED BY THE ULC FOR DOORS WITH FIRE RESISTANCE RATING AND EMERGENCY EXITS.
7. FASTENERS: PROVIDE FASTENERS REQUIRED FOR THE SMOOTH FUNCTIONING OF HARDWARE ITEMS. EXPOSED FASTENERS TO MATCH HARDWARE ITEM FINISH. USE FASTENERS MADE OF A MATERIAL COMPATIBLE WITH THE ONE THEY PENETRATE.
8. KEYS: ALL LOCKS TO BE SUBJECT TO A MASTER KEY SYSTEM ESTABLISHED WITH THE OWNER. PROVIDE TWO (2) DUPLICATES OF MASTER KEY TO MATCH MAIN BUILDING AND TWO (2) KEYS BY LOCK. STAMP CODE NUMBERS ON KEYS AND BARRELS.

09.1 - GYPSUM BOARD PARTITIONS

1. REFERENCE STANDARD: GYPSUM PARTITIONS IN COMPLIANCE WITH CAN/CSA–A82.27 STANDARD, CGC MANUAL AND PLAN DETAILS.
2. SUBMIT FOR APPROVAL THE TRACED LAYOUT OF ALL PARTITIONS ON SITE BEFORE ERECTING PARTITIONS.
3. STANDARD BOARD: IN COMPLIANCE WITH CAN/CSA–A82.27 STANDARD, TYPE X, THICKNESS INDICATED, 48" WIDE AND MAXIMUM PRACTICAL LENGTH. USE WATERPROOF GYPSUM BOARD ON ALL BATHROOM AND JANITOR CLOSET WALLS.
4. LIGHTWEIGHT CONCRETE BOARDS: SMOOTH, THICKNESS INDICATED, 36" WIDE PER MAXIMUM PRACTICAL LENGTH, ENDS SQUARE CUT, EDGES BEVELED, ASBESTOS–FREE AND GYPSUM–FREE, MADE OF POLYMETISED–EMULSION–MODIFIED CEMENT AND POLYSTYRENE PELLETS, REINFORCED ON BOTH FACES WITH A GLASS FIBRE MAT COATED WITH VINYL. LIGHTWEIGHT CONCRETE PANEL ON ALL WALLS TO HAVE CERAMIC TILING.
5. JOINTING PRODUCTS FOR GYPSUM BOARD: IN COMPLIANCE WITH CAN/CSA–A82.31M STANDARD AND AS PER MANUFACTURER'S RECOMMENDATIONS.
6. NON–BEARING STUDS: SECTION C, THICKNESS AT INDICATED, 25 CALIBER, KNOCKOUT SERVICE HOLES OF 1–1/2" X 2" AND 1–1/2" DIAM. AT 18" c./c. AND WITH TOOTHED FASTENERS FOR STAND–ALONE FIBROUS INSULATION. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR CALIBER OF WALL MOUNTS HIGHER THEN 185"
7. LOWER, TOP AND LATERAL TRACKS: SECTION U, THICKNESS SAME AS STUDS.
8. YIELDING TRACKS: SECTION U, WIDTH: 1/8" MORE THAN TOP TRACKS, DEPTH: 2" EXCEPT OTHERWISE INDICATED IN DRAWINGS.
9. STIFFENERS AND BRIDGING: SECTION U, THICKNESS OF 1/16", ANGLES FOR BRIDGING INSTALLATION: L–SHAPED, SAME THICKNESS OR SUPERIOR AS BRIDGINGS.
10. FURRING CHANNELS: THICKNESS 1/32", EXCEPT OTHERWISE INDICATED.

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DATE	DESCRIPTION	ISSUE	REV.
2014.07.23	ISSUED FOR TENDER	02	
2014.07.21	ISSUED FOR REVIEW	01	

PROJECT NAME

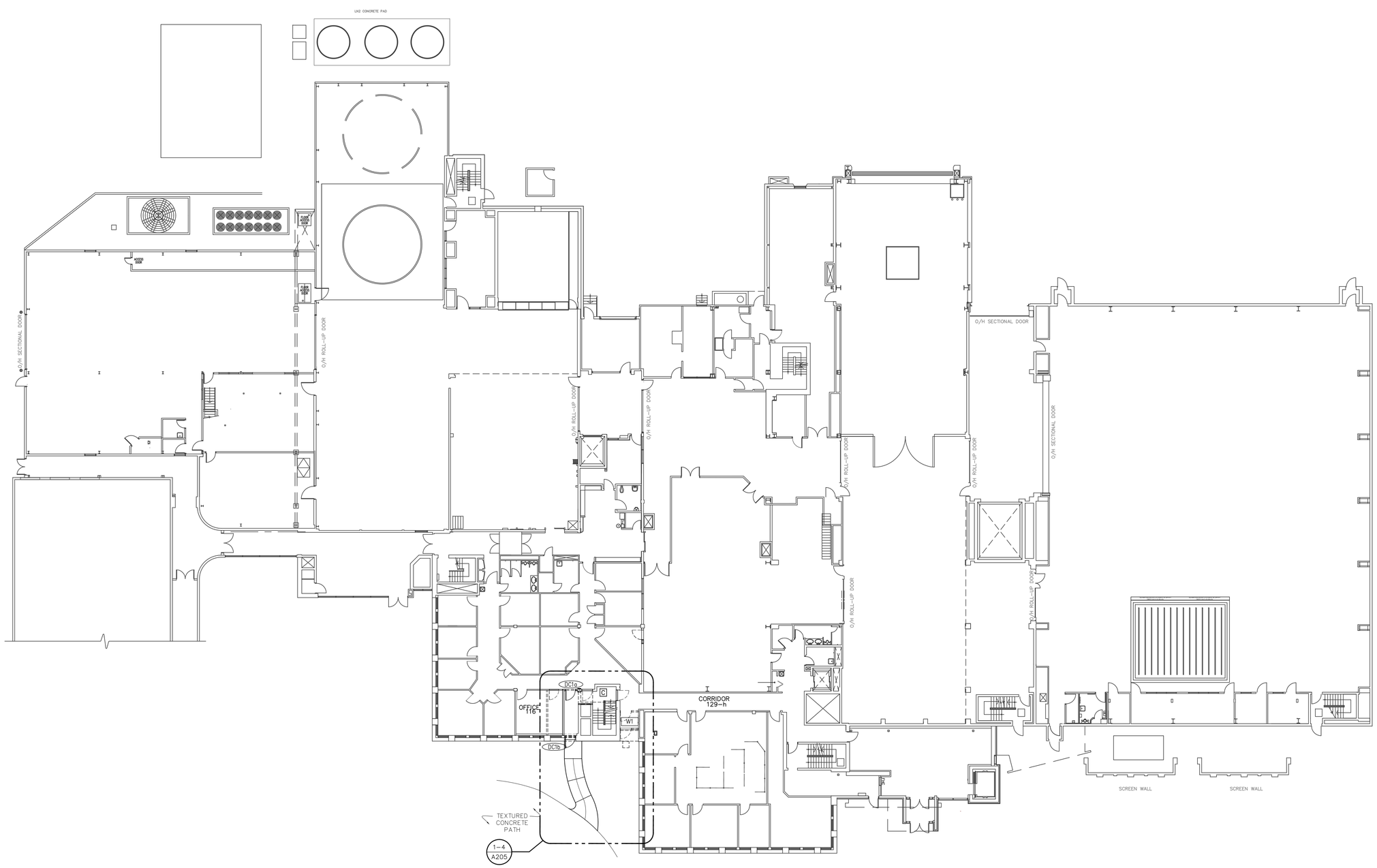
DFL FIRE SEPARATIONS BUILDING UPGRADES, Phase 1

3701 CARLING AVE
OTTAWA, ON

DRAWING TITLE

ABBREVIATED SPECIFICATIONS

DATE
00.00.2014
SCALE
AS NOTED
L+D PROJECT NO.
14.004
CSA PROJECT NO.
CSA13-G3
DRAWN BY
RJ
REVIEWED BY
LCL
DRAWING NO.
A-100



1 / A-201 GROUND FLOOR LEVEL
1:200

GENERAL NOTES

A. UNLESS OTHERWISE INDICATED, DIMENSIONS ARE TO BE ESTABLISHED FROM THE FINISHED FACE OF GYPSUM BOARD WALLS, THE FINISHED FACE OF CONCRETE WALLS, EXISTING WALLS AND STRUCTURAL GRID LINE.

B. UNLESS OTHERWISE INDICATED, STEEL STUDS ARE TO GO FROM SLAB TO UNDERSIDE OF STRUCTURE. GYPSUM BOARD TO FINISH A MINIMUM OF 100mm ABOVE FINISHED CEILING.

C. PROVIDE MECHANICAL P. ENG STAMPED SHOP DRAWINGS FOR ALL NEW LOUVER/TRANSFER GRILLES

D. REFER TO DRAWINGS A-700 FOR DOOR & WINDOW INFORMATION

E. UNLESS OTHERWISE INDICATED ALL NEW WALL & CEILING SURFACES TO BE PRIMED AND PAINTED.

F. UNLESS OTHERWISE INDICATED ALL NEW DOORS & FRAMES TO RECEIVE PAINT ON BOTH SIDES.

G. REPAIR DAMAGED FRAMING RESULTING FROM DEMOLITION. PROVIDE NEW FRAMING WHERE REQUIRED.

WALL TYPE	DESCRIPTION	FIRE RATING ULC RATING
P1	13mm GYPSUM BOARD. 92mm STEEL STUDS 13mm GYPSUM BOARD	
P2	2 LAYERS 13mm 'X' TYPE GYPSUM BOARD. 64mm CH METAL STUDS. FILL STUD CAVITY W/ ACOUSTIC BATT. 25mm GYPSUM BOARD.	2 HR. F.R.R. SHAFT WALL ULC W452
P3	2 LAYERS 13mm 'X' TYPE GYPSUM BOARD. 92mm STEEL STUDS. 75mm ACOUSTIC BATT. 2 LAYERS 13mm 'X' TYPE GYPSUM BOARD.	2 HR. F.R.R. ULC U412
P4	3 LAYERS 13mm 'X' TYPE GYPSUM BOARD. CH STEEL STUDS* FILL STUD CAVITY W/ ACOUSTIC BATT 19mm GYPSUM BOARD	2 HR. F.R.R. HORIZONTAL SHAFT WALL WSD2H WH1-495-PSH-189 &190

NOTES:

* STUD SELECTION BASED ON SPAN, BY DRYWALL CONTRACTOR

CLIENT

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PROJECT NAME

DFL FIRE SEPARATIONS BUILDING UPGRADES, Phase 1

3701 CARLING AVE
OTTAWA, ON

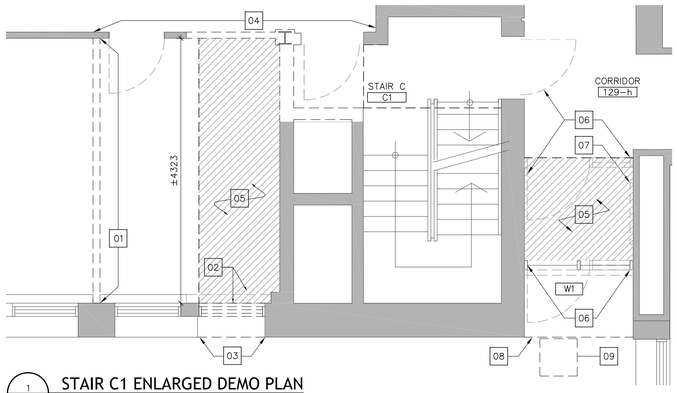
DRAWING TITLE

GROUND FLOOR LEVEL

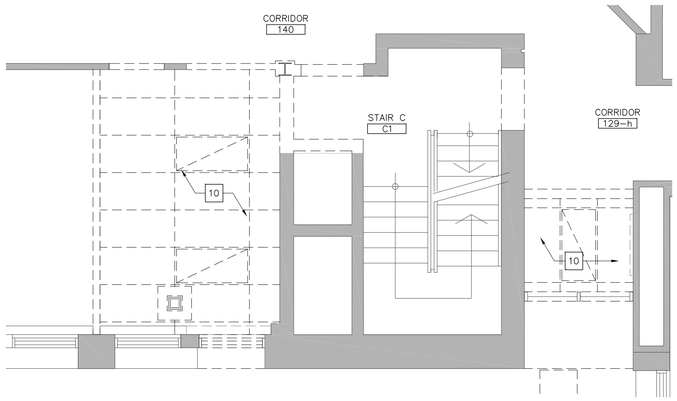
DATE	L+D PROJECT NO.	CSA PROJECT NO.
00.00.2014	14.004	CSA13-G3
SCALE 1:200		

DRAWN BY: SS
REVIEWED BY: LCL

DRAWING NO. A-201



1 / A–205 STAIR C1 ENLARGED DEMO PLAN
1:50



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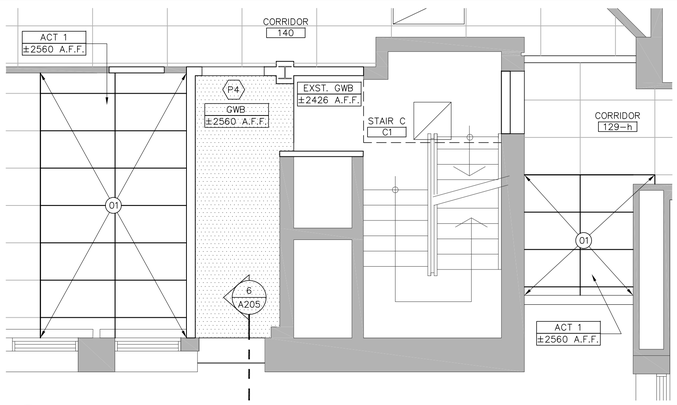

3 / A–205 STAIR C1 REFLECTED CEILING PLAN
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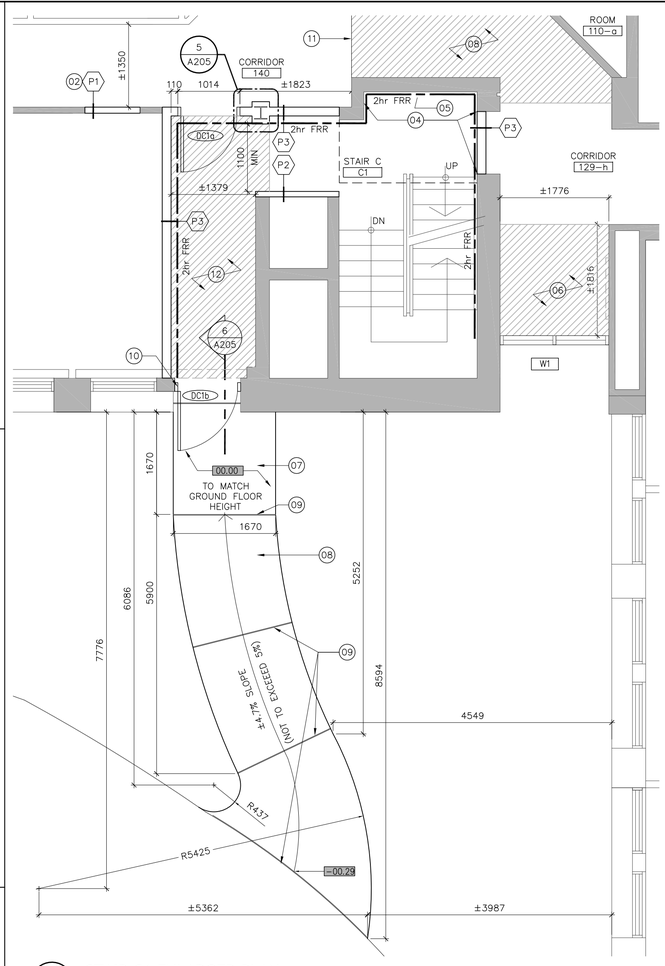
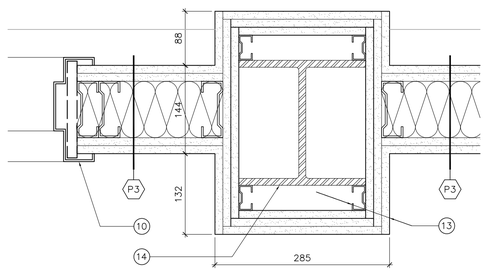
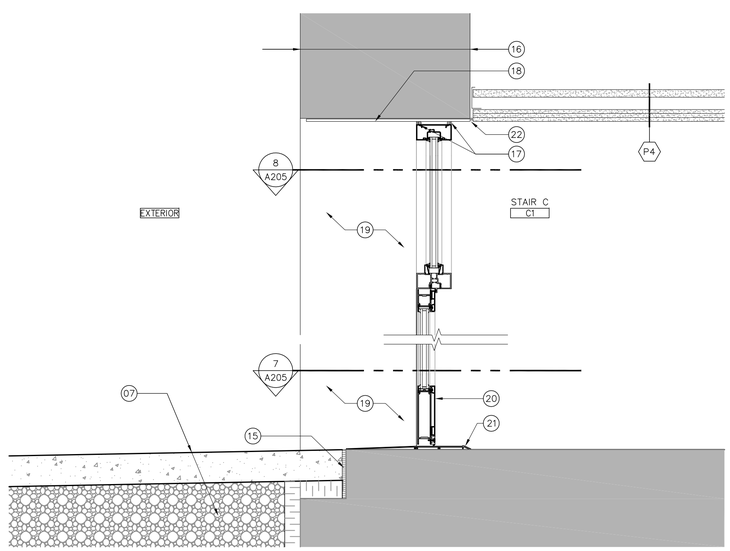


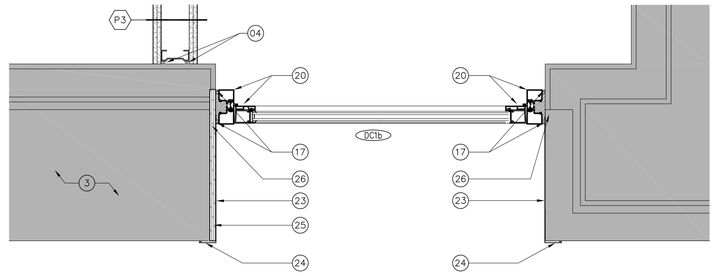
4 / A–205 STAIR C1 ENLARGED PLAN
1:50



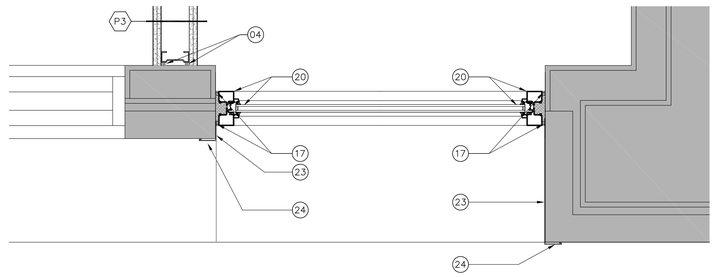
5 / A–205 COLUMN PLAN DETAIL-STAIR C1
1:5



6 / A–205 SECTION DETAIL @ STAIR C DOOR
1:5



7 / A–205 PLAN DETAIL @ DOOR DC1b (LOWER)
1:10



8 / A–205 PLAN DETAIL @ DOOR DC1b (UPPER)
1:10

GENERAL NOTES

A. UNLESS OTHERWISE INDICATED, DIMENSIONS ARE TO BE ESTABLISHED FROM THE FINISHED FACE OF GYPSUM BOARD WALLS, THE FINISHED FACE OF CONCRETE WALLS, EXISTING WALLS AND STRUCTURAL GRID LINE.

B. UNLESS OTHERWISE INDICATED, STEEL STUDS ARE TO GO FROM SLAB TO UNDERSIDE OF STRUCTURE. GYPSUM BOARD TO FINISH A MINIMUM OF 100mm ABOVE FINISHED CEILING.

C. PROVIDE MECHANICAL P. ENG STAMPED SHOP DRAWINGS FOR ALL NEW LOUVER/TRANSFER GRILLES

D. REFER TO DRAWINGS A–700 FOR DOOR & WINDOW INFORMATION

E. UNLESS OTHERWISE INDICATED ALL NEW WALL & CEILING SURFACES TO BE PRIMED AND PAINTED.

F. UNLESS OTHERWISE INDICATED ALL NEW DOORS & FRAMES TO RECEIVE PAINT ON BOTH SIDES.

G. REPAIR DAMAGED FRAMING RESULTING FROM DEMOLITION. PROVIDE NEW FRAMING WHERE REQUIRED.

LEGEND

2hr FIRE RATED WALL
DEMO LINE
EXISTING WALL TO REMAIN

DEMOLITION NOTES

01 EXISTING WALL TO BE DEMOLISHED.

02 REMOVE EXISTING WINDOW AND RADIATOR, SEE MECHANICAL FOR DETAILS.

03 PORTION OF EXISTING WINDOW SILL TO BE REMOVED. REPAIR FLOOR AND MAKE GOOD FOR NEW DOOR THRESHOLD.

04 EXTENT OF EXISTING WALL, DOORS, FRAMES ND ALL ASSOCIATED HARDWARE TO BE REMOVED.

05 EXTENT OF EXISTING VCT/ CARPET TO BE REMOVED/ GRIND DOWN AND REMOVE ASSOCIATED GLUES AND TOPPINGS. MAKE GOOD FOR NEW FLOORING.

06 EXISTING DOOR, FRAME AND ALL ASSOCIATED HARDWARE TO BE REMOVED.

07 EXISTING WALL RADIATOR TO BE REMOVED, SEE MECHANICAL FOR DETAILS. PATCH AND REPAIR EXISTING WALL.

08 EXISTING CONCRETE LANDING TO BE REMOVED BACK TO CONCRETE SLAB.

09 EXISTING PAVERS TO BE REMOVED AND RETURNED TO OWNER FOR STORAGE.

10 EXISTING SUSPENDED CEILING SYSTEM TO BE REMOVED. EXISTING LIGHTS, SPRINKLERS AND RETURN VENTS TO BE RELOCATED, SEE ELECTRICAL AND MECHANICAL FOR DETAILS.

CONSTRUCTION NOTES

(01) NEW SUSPENDED ACOUSTIC TILE CEILING, GRID TO LINE UP WITH EXISTING CEILING CONDITIONS. HEIGHT TO MATCH EXISTING CONDITIONS. GENERAL CONTRACTOR TO COORDINATE.

(02) STEEL STUDS TO SUIT EXISTING ADJACENT WALL DEPTH.

(03) EXISTING SLOPED MASONRY SILL TO REMAIN.

(04) SEAL ALL JOINTS (BOTH SIDES) AT NEW WALL USING ULC LISTED FIRE STOPPING MATERIAL & INSTALLATION METHOD TO ACHIEVE A 2 HR FIRE RESISTANCE RATING.

(05) SEAL EXISTING CONDUIT FLOOR PENETRATION USING ULC LISTED FIRE STOPPING MATERIAL & INSTALLATION METHOD TO ACHIEVE A 2 HRS FIRE RESISTANCE RATING.

(06) NEW VCT AND RUBBER BASE TO MATCH EXISTING IN CORRIDOR 129–h.

(07) NEW CONCRETE LANDING c/w AGGREGATE ON COMPACTED BASE & SUB–BASE . PATCH AND MAKE GOOD ALL SURFACES. AGGREGATE TO MATCH EXISTING WALKWAY.

(08) NEW CONCRETE SLAB WALKWAY c/w AGGREGATE ON COMPACTED BASE & SUB–BASE (MATCH EXISTING CONDITIONS). PATCH AND MAKE GOOD ALL SURFACES. SLOPED TO MEET EXISTING WALKWAY, SEE SPEC FOR DETAILS.

(09) 12mm JOINTS OF COMPRESSIBLE MATERIAL.

(10) INSTALL NEW DOOR & FRAME C/W ALL ASSOCIATED HARDWARE.

(11) NEW PURPOSE MADE TRANSITION STRIP AT NEW VCT AND EXISTING CARPET.

(12) NEW FLOOR TILE c/w RUBBER BASE TO MATCH EXISTING IN EXIT C1.

(13) 41mm METAL STUDS @400 O/C MAX
3 LAYERS 13mm TYPE X GYPSUM BOARD AS PER O.B.C., SB–2 TABLE 2.6.1, 2HR FRR.

(14) EXISTING STRUCTURAL STEEL COLUMN TO REMAIN.

(15) NEW ASPHALT IMPREGNATED SEPARATION STRIP.

(16) EXISTING WALL CONSTRUCTION TO REMAIN.

(17) ROPE AND CAULK PERIMETER – BOTH SIDES. FILL VOIDS WITH SPRAY FOAM INSULATION ONCE FRAME IS SET.

(18) EXISTING STEEL LINTEL TO REMAIN. PAINT FINISH AS REQUIRED..

(19) 2mm NEW PREFINISHED ALUMINUM FLASHING @ BRICK VENEER MASONRY BEYOND, COLOR TO MATCH EXISTING FLASHING.

(20) NEW PREFINISHED ALUMINUM FRAME, DOOR AND SEALED TRANSOM UNIT. (REFER WINDOW SCHEDULE & SPECIFICATION). COLOUR TO MATCH EXISTING.

(21) NEW THRESHOLD W/ MAXIMUM 1 IN 2 BEVEL SET ON EXISTING FINISHED FLOOR TO SUIT EXISTING WALL DEPTH.

(22) FIRE CAULK PERIMETER OF RATED CEILING AT WALL JUNCTION.

(23) NEW 2mm PREFINISHED ALUMINUM FLASHING @ JAMBS, FULL HEIGHT OF SIDE SILL WALL. COLOUR TO MATCH EXISTING FLASHING.

(24) CONTINUOUS PREFINISHED ALUMINUM CLEAT MECHANICALLY FASTENED TO EXISTING MASONRY USING MASONRY SCREWS. CAULK TO FACE OF MASONRY VENEER.

(25) NEW 16mm EXTERIOR GRADE PLYWOOD (PRE–WRAPED WITH FLEXIBLE V.P. MEMBRANE) FIXED EXPOSED OPENING. STEEL STUD/P.T WOOD BLOCK FRAMING TO SUIT.

(26) 150mm (MIN.) LAPPED SELF–ADHESIVE AIR/VAPOUR BARRIER OVER EXISTING PRIMARY SELF–ADHESIVE AIR/VAPOUR BARRIER. LAP TO BE CARRIED UP AND OVER BLOCKING & INTO WINDOW FRAME.

WALL TYPE	DESCRIPTION	FIRE RATING ULC RATING
P1	13mm GYPSUM BOARD. 92mm STEEL STUDS 13mm GYPSUM BOARD	
P2	2 LAYERS 13mm 'X' TYPE GYPSUM BOARD. 64mm CH METAL STUDS. FILL STUD CAVITY W/ ACOUSTIC BATT. 25mm GYPSUM BOARD.	2 HR. F.R.R. SHAFT WALL ULC W452
P3	2 LAYERS 13mm 'X' TYPE GYPSUM BOARD. 92mm STEEL STUDS. 75mm ACOUSTIC BATT. 2 LAYERS 13mm 'X' TYPE GYPSUM BOARD.	2 HR. F.R.R. ULC U412
P4	3 LAYERS 13mm 'X' TYPE GYPSUM BOARD. CH STEEL STUDS* FILL STUD CAVITY W/ ACOUSTIC BATT 19mm GYPSUM BOARD	2 HR. F.R.R. HORIZONTAL SHAFT WALL WSD2H WH1–495–PSH–189 &190

NOTES:

* STUD SELECTION BASED ON SPAN, BY DRYWALL CONTRACTOR

CLIENT

Canadian Space Agency / Agence spatiale canadienne

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DATE	DESCRIPTION	ISSUE	REV.
2014.07.23	ISSUED FOR TENDER	02	
2014.07.21	ISSUED FOR REVIEW	01	

PROJECT NAME

DFL FIRE SEPARATIONS BUILDING UPGRADES, Phase 1

3701 CARLING AVE
OTTAWA, ON

DRAWING TITLE

EXIT C ENLARGED and DETAILED
FLOOR PLANS and SECTIONS
DEMO & NEW PLANS

DATE	L+D PROJECT NO.	CSA PROJECT NO.
2014.06.03	14.004	CSA13-G3

SCALE
AS NOTED

DRAWN BY
SS

REVIEWED BY
LCL

DRAWING NO.
A-205

DOOR AND FRAME SCHEDULE

					OPENING		FRAMES					DOORS									
NEW/ EXISTING	DOOR #	ROOM NAME	FROM	TO	JAMB	HEAD	TYPE	JAMB	HEAD	MATERIAL	FINISH	TYPE	MATERIAL	SWING	FINISH	WIDTH (mm)	HEIGHT (mm)	THICKNESS (mm)	F.R.R. OF FIRE SEPARATION (min.)	HARDWARE	COMMENTS
NEW	DC1a	STAIR C	CORR 140	C1	GB	GB	1	GB.1	GB.2	PS	PT	B	HM	RH		±914	±2134	45	2HRS	GROUP 1	
NEW	DC1b	STAIR C	C1	EXIT	M	M	2			AL	–	A	AL	RH		±1072	±2134	45	0	GROUP 2	SEE DETAIL 6/A–205, NEW INSULATED ALUMINUM DOOR

WINDOW SCHEDULE

NEW/ EXISTING	WINDOW #	FLOOR	ROOM NAME	JAMB	HEAD	TYPE	MATERIAL	WIDTH (mm)	HEIGHT (mm)	THICKNESS (mm)	TOTAL	COMMENTS
NEW	W1	LVL 1	CORRIDOR 129–h	M	M	W1	AL	±1776	±2500	±150	1	

DOOR AND FRAME LEGEND

A. CONTRACTOR TO VERIFY DIMENSIONS TO SUIT EXISTING OPENINGS PRIOR TO MANUFACTURING.

B. CONTRACTOR TO CONFIRM NEW DOOR OPERATOR COMPATIBILITY WITH EXISTING HARDWARE.

C. INSTALL ALL DOORS IN ACCORDANCE W/ NFPA–80.

AL	ALUMINUM
CB	CONCRETE BLOCK
CO	CONCRETE
EW	EXISTING WALL
EXT	EXTERIOR
IGU	INSULATED GLASS UNIT
GB	GYPSUM BOARD
HM	HOLLOW METAL
M	MASONRY
PNT	PAINT
PS	PRESSED STEEL
W	WOOD
WG	GEORGIAN WIRED GLASS

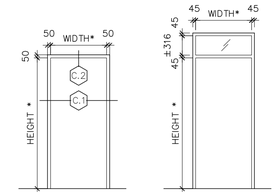
HARDWARE GROUPS

GROUP 1:

3	HINGES
1	DOOR PUSH BAR
2	KICK PLATES
1	LEVER HANDLE
1	DOOR CLOSER

GROUP 2:

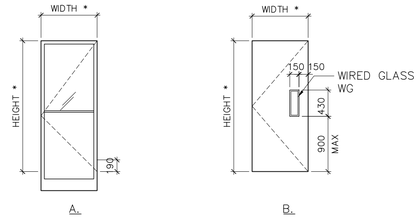
3	HINGES
1	KEY LOCK
1	EXIT PANIC BAR
1	DOOR CLOSER
1	THRESHOLD



1. PRESSED STEEL 2. ALUMINUM

* SEE DOOR AND FRAME SCHEDULE FOR DOOR TYPE AND DIMENSIONS

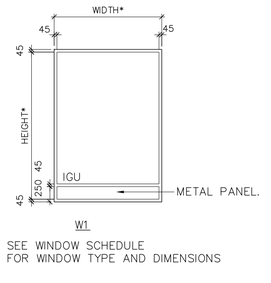
1/A–700 **FRAME TYPES** 1:50



A. B.

* SEE DOOR AND FRAME SCHEDULE FOR DOOR TYPE AND DIMENSIONS

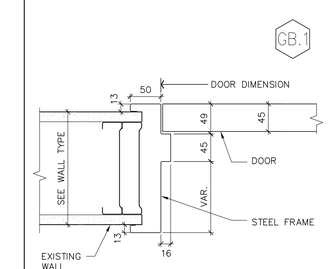
2/A–700 **DOOR TYPES** 1:50



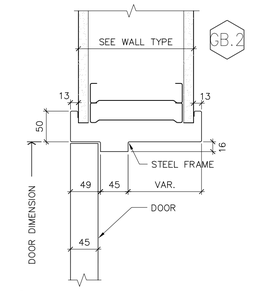
W1

* SEE WINDOW SCHEDULE FOR WINDOW TYPE AND DIMENSIONS

3/A–700 **WINDOW TYPES** 1:50



4/A700 **GB.1 DETAIL DOOR FRAME** 1:5



5/A700 **GB.2 DETAIL DOOR FRAME** 1:5

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PROJECT NAME

DFL FIRE SEPARATIONS BUILDING UPGRADES, Phase 1

3701 CARLING AVE
OTTAWA, ON

DRAWING TITLE

DOOR & WINDOW SCHEDULE

FRAME DETAILS

DATE	L+D PROJECT NO.	CSA PROJECT NO.
2014.06.03	14.004	CSA13-G3
SCALE: AS NOTED		

DRAWN BY: SS
REVIEWED BY: LCL

DRAWING NO. A-700