PRODUCT SPECIFICATIONS **DIVISION 07 THERMAL & MOISTURE PROTECTION DIVISION 08 DIVISION 09 FINISHES DIVISION 09 FINISHES DIVISION 08 OPENINGS** TABLE OF CONTENTS D) DOOR HARDWARE (continued) B) BATT INSULATION A) Gypsum board (continued) B) Rough Carpentry (continued) B) HOLLOW METAL DOORS AND FRAMES Division 05 - Metals SUBMITTALS EXECUTION Section Includes: Thermal, batt-type glass fiber insulation in framed wall FASTENER FINISHES Section Includes: exterior doors- staff house .1 Submit in accordance with Submittal Procedures. A - Post & glass railing system .1 do application and finishing of gypsum board in accordance with astm c840 .1 Galvanizing: to CSA G164, use galvanized finished fasteners for exterior work, and roof assembly, for patch and repair as required in drawings. .2 Product Data: manufacturer's printed product literature, specifications and except where specified otherwise. pressurepreservative treated lumber. Design Criteria .2 install ceiling boards in direction that will minimize number of end-butt joints. Division 06 - Wood, Plastics and Composits Design Criteria Hot dipped galvanized steel sheet: to ASTM A653/A653M, coating designation .3 Hardware List: vertical form hardware list indicating manufacturer, model, stagger end joints at least 250 mm. PRESSURE TREATED WOOD A - Rough Carpentry for locations as follows: material, function, finish and other pertinent information for each different type of .3 install gypsum board on walls vertically to avoid end-butt joints. at stairwells .1 Do not use preservative treated lumber or plywood for: Unfaced Batt Insulation: ASTM C 665, Type I, preformed formaldehyde .1 Exterior doors and frames: Z275 (G90). and similar high walls, install boards horizontally with end joints staggered over hardware item proposed for use. .1 Wood in direct contact with roofing membranes such as roof curbs, nailers, Division 07 - Thermal and Moisture Protection .2 Minimum base steel thickness (gauge) in accordance with CSDFMA Table 1 free glass fiber batt studs, except where local codes or fire-rated assemblies require vertical sleepers, and parapets. A - Loose fill insulation type, unfaced, Includes Unfaced SonoBatts and Sound Attenuation Batts, except as follows: .4 Shop Drawings: application. .2 Provide lumber and plywood materials pressure preservative treated for the B - Batt Insulation .1 Door face sheets: 1.2 mm (18 gauge). 1. Noncombustible per ASTM E 136. .1 Submit shop drawings for electrified hardware. Identify manufacturer, model, .4 install gypsum board with face side out. C - Soffit .2 Frames: 1.6 mm (16 gauge). 2. Flamespread less than 25, smoke developed less than 50 per function, finish, options and other pertinent information. List each item .5 do not install damaged or damp boards. .1 Furring, blocking on exterior of building. .3 Astragals: 1.9 mm (14 gauge). D - Sheet Metal Flashing & Trim ASTM E84. .6 locate edge or end joints over supports, stagger vertical joints over different .2 Rough bucks at exterior openings. .4 Floor anchors: 1.6 mm (16 gauge). E- Cement board Cladding 3. ICC Building Code Construction Classification: All types. .2 Provide description of operation for each different hardware set or function. studs on opposite sides of wall. .3 Wood below grade or in contact with ground. .5 Jamb anchors: .3 Include schematic wiring diagrams, electrical service requirements, 4. Water vapor sorption, Maximum by weight: not more than 5 .4 Other materials indicated on the drawings. .1 "T" strap type: 1.6 mm (16 gauge). Division 08 - Openings WALL FURRING interconnection diagrams. .3 Preservative: to CSA-O80 Series, water-borne, alkaline copper quaternary .2 "L" type: 1.2 mm (18 gauge). A - Hardware Schedule (refer to drawing) .4 Include parts lists and part numbers for each item. .1 install wall furring for gypsum board wall finishes in accordance with astm (ACQ); or copper azole (CA-C) for clear finish. Performance Criteria .3 Stirrup-strap type: 15 x 250 x 1.6 mm (16 gauge). .5 Manufacturer's Instructions: submit manufacturer's installation instructions. c840, except where indicated otherwise. .4 Treat material to CSA O80 Series using preservative to obtain minimum net B - Hollow Metal Doors and Frames .4 Stud type: 1.2 mm (18 gauge). .2 frame openings and around built-in equipment on four sides, extend furring C- Wood Doors and Frames (refer to drawing) retention for exposures as follows: Wood Frame Construction - Roof/Floor/Ceiling, R-Value: Per ASTM C518. .5 Wire type: 4.0 mm (9 gauge). QUALITY ASSURANCE into reveals.check clearances with equipment suppliers. .1 UC3.2 - material above grade. D - Door Hardware 1. R-19, 6-1/4 inch (159mm) thickness, 15 inch (381mm) or 19-1/4 .6 Reinforcing steel: .1 Regulatory Requirements: hardware for doors in fire separations and exit .3 furr duct shafts, beams, columns, pipes and exposed services where .2 UC4.1 - material below grade or in contact with ground. E - Glazing inch (489mm) or 23 inch (584mm) .1 Locks, strikes: 1.6 mm (16 gauge). doors certified by a Canadian Certification Organization accredited by .5 Each piece of treated material shall be identified with a tag or ink mark width, 48 inch (1219mm) or 93 inch (2362mm) length. .2 Butts, hinges: 3.4 mm (10 gauge). Standards Council of Canada. bearing the Canadian Wood Preservers' Bureau quality mark. Division 09 - Finishes .3 Surface mounted hardware: 2.7 mm (12 gauge). GYPSUM BOARD APPLICATION .2 Test Reports: certified test reports showing compliance with specified .6 Following water-borne preservative treatment, dry material to maximum A - Gypsum board Assemblies .7 Flush bolts: 3.4 mm (10 gauge). Material: Acceptable Manufactures. .1 do not apply gypsum board until bucks, anchors, blocking, sound performance characteristics and physical properties. moisture content of 19% (S-dry)% or less .8 Glazing stops: 0.9 mm (20 gauge). ULC approved for fire rated doors and B- Rough Carpentry Owens Corning or approved equal. attenuation, electrical and mechanical work are approved. .3 Certificates: product certificates signed by manufacturer certifying materials .7 Field treatment: comply with AWPA M4 and revisions specified in CSA O80 C - Painting .2 apply single layer gypsum board to furring or framing using screw fasteners. Series, Supplementary Requirements to AWPA M2. Apply surface applied wood comply with specified performance characteristics and criteria and physical .9 Channel reinforcement for glazed and louvre openings: 0,9 mm (20 gauge). D - Baseboard, window trim apply double layer gypsum board to furring or framing using screw fasteners for preservative to heartwood exposed from trimming, cutting, or boring. requirements. C) SOFFIT .10 Mortar guard boxes: 0.8 mm (22 gauge). E - Vinyl Plank Flooring first layer, laminating adhesive for second layer, maximum spacing of screws .4 Pre-installation Meetings: conduct pre-installation meeting to verify project .8 Remove chemical deposits on treated wood to receive applied finish. .11 Jamb spreaders: 1.2 mm (18 gauge). 300 mm on centre. requirements, Section Includes: Aluminum metal soffit - all four facilities NOTES REGARDING SPECIFICATIONS: .1 single-layer application: FURRING AND BLOCKING .1 apply gypsum board on ceilings prior to application of walls in Material: Acceptable Manufactures. .1 Install furring and blocking as required to space-out and support casework, Design Criteria Roll formed Full vent aluminum metal soffit. Min 4.01 Stiffened: face sheets laminated or welded, insulated core. accordance with astm c840 cabinets, surface applied fixtures and equipment, wall and ceiling finishes, Square Inches ventilation per linear foot. .2 Expanded polystyrene: CAN/ULC-S701. Type 2. density 16 to 32 SHOP DRAWINGS: .2 apply gypsum board vertically or horizontally, providing sheet lengths facings, fascia, soffit, siding and other work as indicated. Assa Abloy or approved equal. that will minimize end joints. .2 Align and plumb faces of furring and blocking to tolerance of 1:600. Commercial Double 6" Vented Aluminum Soffit .3 Polyurethane: to CGSB 51-GP-21M rigid, modified poly/isocyanurate, .2 double-layer application: - Provide detailed drawings of any atypical non-standard applications E) GLAZING closed cell board. Density 32 kg/m3. Profile: V Groove .1 install gypsum board for base layer and exposed gypsum board for face NAILING STRIPS, GROUNDS AND ROUGH BUCKS of materials which are outside of the scope of the standard details Perforation: Full vent .1 Install rough bucks, nailers and linings to rough openings as required to and specifications provided by the manufacture. Section Includes: exterior glazing on all buildings. FRAMES FABRICATION GENERAL Blocking: 12" 0.C. .2 apply base layer to ceilings prior to base layer application on walls; provide backing for frames and other work. .1 Fabricate frames in accordance with CSDFMA specifications. Colour: White (Standard Colour) apply face layers in same sequence, offset joints between layers at least .2 Except where indicated otherwise, use material at least 38 mm thick. **SELECTION SAMPLES:** Design Criteria .2 Fabricate frames to profiles and maximum face sizes as indicated. .3 For concrete block or cast-in-place concrete backing secure lumber with 10 Gauge: Min 29 .3 Exterior frames: expandable type construction. .3 apply base layers at right angles to supports unless otherwise indicated. mm diameter galvanized bolts located within 300 mm from ends of members - For each finish product specified, two complete sets of color chips .1 Ensure continuity of building enclosure vapour and air barrier using glass and .4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive .4 apply base layer on walls and face layers vertically with joints of base and uniformly spaced at maximum 1200 mm on centre between. Countersink Material: Acceptable Manufactures. glazing materials as follows: representing manufactures full range of available color and patterns. hardware and electronic hardware using templates provided by door hardware layer over supports and face layer joints offset at least 250 mm with base bolts where necessary to provide Georgia Pacific or approved equal. .1 Utilize inner light of multiple light sealed units for continuity of air and supplier. Reinforce internally for surface mounted hardware. layer joints. clearance for other work. .5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to **VERIFICATION SAMPLES:** .2 Limit glass deflection to 1/200 with full recovery of glazing materials. hinge reinforcement, 25 mm leg to frame. D) SHEET METAL FLASHING & TRIM GYPSUM BOARD FINISHING FASCIA BACKING, CURBS, NAILERS .3 Design glass units to withstand thermal stresses created by solar heat .6 Reinforce head of frames wider than 1200 mm. .1 do taping and filling to astm c840, except where indicated otherwise. - For each finish product specified, two samples, minimum size 4 by 6 .1 Install fascia backing, nailers, curbs and other wood supports as required and gain, shadowing of exterior components or assemblies (soffits, .7 Prepare frame for door silencers, three for single door, and two at head for .2 finish face panel joints and internal angles with joint system consisting of joint inches, representing actual product, color, and patterns. secure using galvanized fasteners. sunshades, buildings, trees, signs) and elevated interstitial space compound, joint tape and taping compound installed according to Section Includes: Pre-finished flashing / Metals: All flashing, Drip Caps, .2 Secure roof curbs and nailers with 10 mm diameter galvanized bolts where temperatures, and from solar heat gain. .8 Manufacturer's nameplates on frames and screens are not permitted. NOTES REGARDING FINISHES: manufacturer's directions and feathered out onto panel faces. Downspouts, Scuppers to match window frame colour (white) indicated, galvanized nails elsewhere. Space bolts within 300 mm from ends of .9 Conceal fastenings except where exposed fastenings are indicated. .3 finish corner beads, control joints and trim as required with two coats of joint members and uniformly spaces at maximum 1200 mm on centre between. **INSULATING GLASS UNITS** .10 Insulate exterior frame components with fibreglass batt insulation. compound and one coat of taping compound, feathered out onto panel faces. Countersink bolts where necessary to provide clearance for other work. - Flame spread ratings to not exceed as per 2010 MANITOBA Design Criteria .1 Insulating glass units: to CAN/CGSB-12.8 and certified by Insulating Glass .4 fill screw head depressions with joint and taping compounds to bring flush .3 Install vapour barrier sheet membrane, supplied by Contractor, under roof BUILDING CODE table 3.1.13.2. note general area maximum flame Manufacturers Association of Canada (IGMAC). FRAME INSTALLATION with adjacent surface of gypsum board so as to be invisible after painting is curbs, nailers and sleepers on roof deck for continuity of roof vapour barrier over spread rating is 150. PREFINISHED STEEL SHEET .2 Thermal spacers for insulating glass units: triple seal design consisting of .1 Set frames plumb, square, level and at correct elevation. entire roof deck. Ensure vapour barrier sheets extend a minimum of 300 mm .1 Prefinished steel sheet: zinc-coated steel sheet with factory-applied thermoset foam spacer with integral desiccant, pre-applied adhesive, captive .2 Secure anchorages and connections to adjacent construction. .5 sand lightly to remove burred edges and other imperfections, avoid sanding onto roof deck to allow for overlap to vapour barrier sheet installed by roofing **DIVISION 05 METALS** silicone modified polyester (SMP) coil coating, minimum base metal polyisobutylene primary seal; with silicone perimeter seal. Colour WHITE. Ensure .3 Brace frames rigidly in position while building-in. Install temporary horizontal adjacent surface of board. contractor. Apply as continuous strips; overlap end laps minimum 100 mm and perimeter seal is compatible with edge sealants of insulating glass units. thickness specified by item. wood spreader at third points of door opening to maintain frame width. Provide .6 sanding not require behind solid finishes and above finished ceilings. vertical support at centre of head for openings over 1200 mm wide. Remove A) RAILINGS Colour 1: custom colour, white to match white specified windows/ doors .7 completed installation to be smooth, level or plumb, free from waves and TYPICAL Insulating Glass Units: temporary spreaders after frames are built-in. Colour 2: custom colour, black, to match black colour specified in other defects and ready for painting or other thin finish coating including fabric C) Painting .1 Double glazed, 25 mm overall thickness. .4 Make allowances for deflection of structure to ensure structural loads are not Section Includes: Pre-Engineered Topless post & glass railing system windows/ doors wall coverings. GYPSUM BOARD FINISH LEVEL (railing replacement Lake view residence & new patio railing on Forman's Section Includes: paint & primer products for all required patch and 1 Outboard light: clear, fully tempered safety glass, 6 mm thick. .5 Maintain continuity of air barrier and vapour retarder at exterior openings. level 4(typical): Fasteners: of same material as sheet metal, to CSA B111, ring thread flat .2 Inboard light: clear, fully tempered safety glass, 6 mm thick. .6 Coordinate installation with Contractor for installation of junction boxes and repair in scope of work. .1 all joints and interior angles shall have tape embedded in joint compound and head roofing nails of length and thickness suitable for metal flashing .3 Inter-cavity space: 12 mm thick. conduit for electric hardware, wiring, and controls for electronic hardware. shall be immediately wiped with a joint knife or trowel, leaving a thin coating of Design Criteria - 42" high guard post & glass railing. application. .4 Glass coating: surface number 2, low "E" coating. joint compound over all joints and interior angles. in addition, two separate Design Criteria Touch-up paint: as recommended by metal flashing and trim .5 Thermal spacers as specified above. 3.5 CAULKING AND SEALING coats of joint compound shall be applied over all flat joints and one separate .1 Contractor shall have a minimum of five years proven satisfactory experience. manufacture. .6 Inter-cavity space argon gas filled. .1 At exterior openings, fill head and jamb frame sections with foam sealant. Fill coat of joint compound applied over interior angles. fastener heads and When requested, provide a list of last three comparable jobs including, job .1 Glass - withstand lateral loads as provided in Article 4.1.5.14 of shim space around perimeter of frames with foam sealant. name and location, specifying authority, and project manager. accessories shall be covered with three separate coats of joint compound. all Fabricate metal flashings and other sheet metal work in accordance with the Manitoba Building Code.. Screens: to CAN/CGSB-79.1. .2 For both interior and exterior frames seal joint between frames and adjacent .7 Standard of Acceptance: joint compounds shall be smooth and free of tool marks and ridges. applicable CRCA 'FL' series specifications and as indicated. 1 Insect screening mesh: count 18 x 14 construction with sealant (caulking). Apply sealant around full perimeter of .2 locations: where standard and type x gypsum board is to be painted. .1 Walls, doors and other vertical surfaces: no defects visible from a distance of Fasteners: tamper proof Form pieces in 2400 mm maximum lengths. Make allowance for .2 Steel Posts - Loads on Guards shall be designed to resist the frames, on both sides of opening, 1 m at 90° to surface. Screen frames: aluminum, colour to match window frames .2 Ceilings: No defects visible from floor at 45° to surface when viewed using specified loads prescribed in 9.8.8.2. Manitoba Building Code expansion at joints. .3 For frames at exterior openings provide foam backer rod or bond breaker ACCEPTABLE MANUFACTURERS Provide full insect screens to cover entire operable window 2010. Steel posts to be painted anodized black. Hem exposed edges on underside 12 mm. Miter and seal corners with tape behind sealant. supply of gypsum board for this project: final lighting source. .3 Final coat to exhibit uniformity of colour and uniformity of sheen across full .1 canadian gypsum company (us gypsum). surface area and shall be acceptable to Consultant. .2 certainteed gypsum canada inc. Form sections square, true and accurate to size, free from distortion and Material: Acceptable Manufactures. **DIVISION 09 FINISHES** .3 georgia pacific. other defects detrimental to appearance or performance. .1 Permarail Railing system or approved alternative D) DOOR HARDWARE 4 westroc inc. 1.5 SAMPLES Form parapet flashings, cap flashings, copings and fascias to profiles .1 Submit full range colour sample chips. Indicate where colour availability is A) Gypsum board .5 or approved equals indicated of 0.759 mm (22 MSG) prefinished steel sheet. Section Includes: general requirements for door hardware, hollow metal **DIVISION 07 THERMAL & MOISTURE PROTECTION** Form counter flashings, curb flashings to profiles indicated of 0.607 mm .2 Submit duplicate 300 x 300 mm minimum sized sample panels of each finish (24 MSG) zinc coated steel sheet. with specified paint or coating in colours, gloss/sheen and textures Section Includes: all patch & repair drywall required in scope of work B) Rough Carpentry Form overflow scuppers and downspouts from 0.759 mm (22 MSG) A) LOOSE FILL INSULATION Design Criteria prefinished steel sheet to sizes and profiles indicated. Design Criteria Section Includes: Misc. Wood stud framing D) Baseboards / Window Trim Provide necessary fastenings. Section Includes: Thermal, Loose fill-type glass fiber insulation in roof .1 Door hardware: as specified in drawing Hardware Schedule and as assembly. Section Includes: Wood baseboards & window trim - 1/2" interior gypsum board Design Criteria specified in this section. - Moisture resistant 1/2" gypsum board in all bathrooms and kitchens .1 Lumber: unless specified otherwise, softwood, S4S, moisture content 19% Design Criteria Information (S-dry) or less, S-P-F species, NLGA No. 2 grade or better, in accordance with Design Criteria E) CEMENT BOARD CLADDING GYPSUM BOARD .1 Bring in locksets from factory properly itemized as to keying and location. following standards: .1 Mineral fibre insulation: to CAN/ULC-S702, asbestos-free mineral fibre .2 Except where indicated otherwise provide locksets with backsets as follows: .1 standard board: to astm c1396/c1396m, thickness indicated, 1220mm (4'-0") .1 CAN/CSA-O141 - Softwood Lumber. Residences: - 1/2" x 5" Primed Medium Density Fiberboard Baseboards Section Includes: Cement board lap siding, smooth 12 inches w/ 10-3/4' Type 5 - blowing wool, suitable for application by means of pneumatic .1 Lever handles: 70 mm .2 NLGA Standard Grading Rules for Canadian Lumber. wide x maximum practical length, ends square cut, edges bevelled. - 1/4" C 3" Primed Medium Density Fiberboard Window Trim inch exposure. .2 Knobs: 127 mm, except where door design doesn't allow deep backset .2 backing board and coreboard: to astm c1396/c1396m, thickness indicated, .2 Glued end-jointed (finger-jointed) lumber is not acceptable. equipment. Staff house: - Baseboards to match existing - Contract Adminstrator to use 70 mm or as specified in Door Hardware Schedule. squared edges. .3 Douglas fir plywood (DFP): to CSA 0121, standard construction. Design Criteria Noncorrosive (per ASTM C764, section 12.7) .4 Canadian softwood plywood (CSP): to CSA 0151, standard construction. ACCESSORIES .5 Poplar plywood (PP): to CSA 0153, standard construction. Does not absorb moisture (per ASTM C1104) E) VINYL PLANK FLOORING .1 Fibre-cement siding- complies with ASTM C 1186 .1 Locks shall be master keyed as directed. Submit keying schedule for .1 steel drill screws: to astm c1002, corrosion resistant for water resistant board .6 General purpose adhesive: to CSA O112 Series. Does not support mold growth (per ASTM C1338) and exterior sheathing. 7 Nails, spikes and staples: to ASTM F1667 and NBC requirements. Section Includes: Glue down vinyl plank flooring .2 Provide three keys for every lock in this Contract. .2 laminating compound: as recommended by manufacturer, asbestos free. .8 Bolts: 12 mm diameter unless indicated otherwise, complete with nuts and Performance Criteria .1 Lap siding - 6d common nail 0.091" x 0.225" x 2.0" .3 casing beads, corner beads fill type: to astm c1047, 25 gauge commercial .3 Provide three master keys for each master key system. washers. Hot dipped galvanized. Design Criteria .4 Stamp keying code numbers on keys and cylinders. grade sheet steel, zinc coated, perforated flanges; one piece length per .2 Flashing & Trim - Screws, purpose made steel, zink plated, dished .9 Proprietary fasteners: toggle bolts, expansion shields and lag bolts, screws Wood Frame Construction - Roof/Floor/Ceiling, R-Value: Per ASTM C518 .5 Stamp "DO NOT DUPLICATE" on master keys. location. plastic casing bead and corner beads not acceptable. and lead plugs, recommended for purpose by manufacturer. steel / neoprene washers size and type recommended by manufacturer, Light gray, wood grain 6mm glue down vinyl plank flooring, 6" x 4' profile R-26- based on 9.25" thickness .6 Deliver all keys to Contract Administrator via registered mail. .4 joint compound and joint tape: to astm c475/c475m, asbestos free. .10 Explosive actuated fastening devices: recommended for purpose by for any exposed fasteners - head colour to be black. w/ underlay. 100% water proof w/ scratch resistant durability. .5 acoustical sealant: as specified in section 07 92 00 - joint sealing. .7 Package all keys in key gathering envelope with all information typed thereon. manufacturer. Material: Acceptable Manufactures. Material: Acceptable Manufactures. .6 insulating strip: rubberized, moisture resistant, 6 mm thick closed cell .1 James Hardie Buidling Products, Inc. or approved equal Material: Acceptable Manufactures. neoprene strip, 25 mm wide, with self-sticking permanent adhesive on one face, Owens Corning or approved equal Armstrong or approved equal. lengths as required. ARCHITECTS SEAL ARCHITECTS SEAL SPECIFICATIONS THE CITY OF WINNIPEG DO NOT SCALE THE DRAWINGS. ELEV. NO REPRODUCTION MAY BE MADE WATER AND WASTE DEPARTMENT WITHOUT THE PERMISSION OF 2 Winnipèg ARCHITECTURE INC. THE GENERAL ENGINEERING DIVISION CONTRACTOR AND ALL SUB-TRADES SHALL CHECK AND VERIFY ALL ARCHITECTURE SHOAL LAKE AQUEDUCT INTAKE CHECKED DESIGNED DIMENSIONS AND DATA NOTED GILMOUR / July 02/2019 JULY DIZAG CG HEREIN WITH CONDITIONS OF THE RESIDENCE UPGRADES SITE AND SHALL BE HELD DRAWN APPROVED ES RESPONSIBLE FOR REPORTING ANY

DISCREPANCIES TO THE CONTRACT

ADMINISTRATOR. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNTIL SIGNED, AND SEALED.

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JULY 2 , 2019

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SHEET 11 OF 11