## PART 1 GENERAL

## 1.1 REFERENCE

- .1 Comply with the General Conditions of the Contract, Supplementary General Conditions and the requirements of Division 1.
- 1.2 RELATED WORK SPECIFIED ELSEWHERE

.1	Unit Masonry	Section 04200
.2	Structural Steel	Section 05100
.3	Steel Roof Deck	Section 05300
.4	Miscellaneous Metals	Section 05500
.5	Rough Carpentry	Section 06100
.6	Carpentry and Millwork	Section 06200
.7	Firestopping System	Section 07270
.8	Metal Doors and Frames	Section 08100
.9	Gypsum Board System	Section 09250
.10	Shop Priming in various Sections	of the Specification
.11	Factory applied paint coatings u	nless otherwise Specified
.12	Mechanical	Division 15
.13	Electrical	Division 16

## 1.3 SCOPE OF WORK INCLUDED

- .1 Finish and paint all " paintable finishes " new surfaces indicated on Drawings, except those exempt by specification and Drawings.
- .2 Following surfaces are considered " non paintable " for purposes of this contract. Omit painted finishes from following items :
  - 1. Any material and equipment furnished completely primed and finished painted by manufacturer.
  - 2. Exterior concrete including building walls, building floors and pavements, except those otherwise scheduled.
  - 3. Stainless steel, weathering steel, anodized or lacquered aluminum, monel metal.
  - 4. Exposed insulation, glass, plastic, resilient floors, treads and bases, ceramic tile and hardware.
  - 5. Prefinished metals.
  - 6. Abrasive finishes on floors.

#### 1.4 SUBMITTALS

.1 Submit samples in accordance with Section 01340.

- .2 Submit after receiving the colour schedule, 1 sample of each colour in the required number of coats on 8" x 10 " pieces of hardboard.
- .3 Identify sample with project number, date, number and description of sample.
- 1.5 TEST AREA
  - .1 A testing area of 100 square feet in the building to be designated by consultant for the purpose of establishing a standard of workmanship, texture, gloss and coverage.
  - .2 Apply samples of all finishes required in the presence of the Consultant and contractor and paint manufacturer.

#### 1.6 ENVIRONMENT

- .1 Temperature shall be at least 13 degrees C during application and curing of 2 component finishes, and 7 degrees C, unless otherwise recommended by manufacturer.
- .2 Maintain uniform ambient temperature during paint application and for at least 24 Hr before and after finish work in each area.
- .3 Except for water based paints, perform no exterior painting work unless substrate temperature is min 2 degrees C above dew point, and relative humidity is less than 80 %.

#### 1.7 INSPECTION

- .1 Have material supplier's representative visit site with contractor and painter prior to commencements of operations to discuss finishing procedures to be used and to analyze conditions of surfaces to be coated, in order that alternative recommendations may be accorded consideration, should adverse conditions exist.
- .2 Ensure that materials suppliers' representatives visit site at intervals during surface preparation and application operations, to ensure that specified products are being used, proper number of coats are being applied, and specified finishing procedures are being implemented.
- .3 Submit to Contractor and consultant a written report of material suppliers' representatives verifying conformance to specifications.

## 1.8 PRODUCT HANDLING

- .1 Store materials in original undamaged condition in warm, dry locations with manufacturer's labels and seals intact, and facing out.
- .2 Store red label materials in location approved by local fire

authority.

- .3 Maintain adequate floor and wall covers in designated storage area, and make good any painter's damages.
- .4 Store oily rags, waste and similar items in covered receptacles during day and remove from site at conclusion of each work day. Provide Carbon Dioxide Fire Extinguisher of min 20 lb capacity in paint storage room.

## 1.9 PROTECTION

- .1 Before commencement of work, remove cover plates of service devices, surface hardware, frames of lighting fixtures and all other obstructions. Replace them in satisfactory condition when work of this section is completed, to the acceptance of the consultant.
- .2 Before commencement of work, protect all surface hardware that is impractical to remove. Protect all weatherstripping, acoustic and smoke seal gaskets.
- .3 Ensure that adequate ventilation is furnished or isolation measures for full protection of workmen from toxic fumes have been taken.
- .4 Post legible warning signs at all points of entry to the areas in which work of this section is being applied.
- .5 Erect suitable barriers to prevent traffic and other trades from working in such areas during applications of this work.
- 1.10 MAINTENANCE MATERIALS
  - .1 Provide two [2] sealed cans, four [4] litre capacity for wall and ceiling paints, and one [1] sealed can, four [4] litre capacity, of every other product in each colour used in the Work for owner's use in maintenance work.
  - .2 Container to be new fully labelled with manufacturer's name, type of paint, and colour.

#### PART 2 PRODUCTS

- 2.1 MATERIALS
  - .1 Paint and Finishing Materials : First line quality of the manufacturer.
  - .2 Paint and finishing materials of the Following manufacturers will be acceptable for use on this work.
    - 1. The Glidden Company.
    - 2. Canadian Pittsburgh Industries
    - 3. Benjamin Moore.
    - 4. Para Paints Canada Inc.

- 5. Pratt and Lambert Inc.
- 6. Sherwin Williams.
- .3 The Consultant reserves the right to refuse /accept a certain brand or type of paint or other finishing material if, in his opinion, it is not suitable or adequate for the use for which it is proposed.
- .4 Paint and finishing materials of other manufacturers may be used only if all requirements of this specifications will be complied with, and the materials are approved by the consultant prior to award of the Contract.
- .5 Paint and Clear Coating on Combustible Surfaces : Underwriters Laboratories of Canada Limited Labelled materials where required by regulations.
- .6 Deliver materials to Site in original unbroken containers bearing brand and maker's name. The presence of any unauthorized material or containers on Site shall be of sufficient cause for rejection of <u>ALL</u> paint materials on Site at that time.
- 2.1 DESCRIPTION OF FINISHES
  - .1 The following terms describe the final finish to be used on the finished surfaces for exterior and interior exposure.
    - .1 Flat Having less than 10 units reading on a standard gloss meter with a 85 degree head.
    - .2 Low Gloss Between 20/30 units reading on a standard gloss meter with a 85 degree head.
    - .3 Semi Gloss Between 50/60 units reading on a standard gloss meter with a 60 degree head.
    - .4 Gloss having plus 85 units reading on a standard gloss meter with a 60 degree head.

## PART 3 EXECUTION

- 3.1 PREPARATION OF SURFACES
  - .1 Before commencement of work, remove switch and outlet plates, surface hardware, frame of lighting fixtures and all other obstructions and properly replace them at completion of work.
  - .2 Remove soiled and used rags, waste and empty containers from building each night. Take every precaution to prevent a fire.
  - .3 Clean floors and adjacent surfaces as well as surfaces to be painted before work is commenced.

- .4 Notify applicable trades as required, for defects in drywall surfaces, openings, and adjoining trim to be filled with patching compound flush with adjoining surfaces by drywall contractor. When dry, smooth and seal the patch before application of the priming coat.
- .5 Fill nail holes, and similar defects after the first coat of paint has been applied. Filler to match the colour of the finish.
- .6 Clean and remove all defects and extraneous matter from surfaces to be finished.
- .7 Remove ferrous metal rust, scale and loose paint by means of scrapers and wire brushes.
- .8 Neutralize galvanized surfaces with approved proprietary brand neutralizing ( etching ) solution.
- .9 Remove foreign matter from surfaces before painting is commenced.
- .10 Prime all knots and sap streaks, on wood with one coat of aluminum primer if to be finished by paint.
- .11 Test all surfaces for moisture content before commencing painting. Do not apply paint when moisture content exceeds 12 % as determined by an approved moisture testing device.
- .12 Surfaces with high alkali conditions shall be washed to neutralize alkali. If paint to be applied is latex emulsion type, wash with 4 % solution of tetrapotassium-pyrophosphate at 5 oz in one gallon of water. If paint to be applied is alkyd resin type, wash with zinc sulphate solution mixed 3 lb with one gallon of water.
- .13 Wire brush concrete and masonry surfaces.
- .14 Surfaces where traces of form oil or parting compound are present shall be treated with a solution composed of one part concentrated muriatic acid and four parts water, to which shall be added one part acid detergent acceptable to paint manufacturer. After application, thoroughly wash with water and allow to dry.
- .15 Advise the consultant, at least three days prior to application, of the use of special prepatory treatment.
- .16 Wood Door Edges : Wipe off dust and grit, remove and surface nicks, blemishes or discolouration with less than 1/64" penetration. Sand or steel wool door edges between coats with 440 grit sand paper.
- .17 Metal Surfaces not Previously Shop Primed :

- 1. Solvent clean metal surface to remove grease and oil to SSPC-SP1-82. Remove rust and mill scale by power tool cleaning to SSPC-SP3-82. Power tool clean weld flux and wash with water to remove alkali contaminants.
- .18 Metal Surfaces Galvanized :
  - Apply cold phosphate surface treatment to SSPC-PT2-82 (ASTM D2092-68) to unpassivated zinc coated metal.
  - .2 For passivated zinc coated metal, power wire brush or vigorously hand wire brush to scuff galvanize thoroughly, and solvent clean to SSPC-SP1-82.
- .19 Cleaning and Touch Up of Structural Steel:
  - .1 Upon completion of steel erection by section 5, clean off construction dirt, oil and other foreign materials likely to impair intercoat adhesion. Perform power tool cleaning to SSPC-SP1-82 to all abraded areas and surfaces and at connectors left unprimed.
  - .2 Perform spray applied touch up to all areas being treated, using airless spray equipment.

#### 3.2 APPLICATION

- .1 Do not undertake exterior painting at temperatures under 10 degrees C or immediately following rain, frost, or dew. Avoid painting surfaces exposed to hot sun.
- .2 Do not undertake interior painting at temperatures under 10 degrees C nor on surfaces where condensation has or will form.
- .3 Thoroughly mix materials before application.
- .4 Apply paint under adequate illumination.
- .5 Apply materials and cut in neatly so as to dry uniformly to the colour and gloss specified, free from runs, sags, wrinkles, crawls and other defects.
- .6 Vary each coat in tone to permit supervision identification.
- .7 Each coat of paint is to be dry and hard before a following coat is applied.
- .8 Paint wood trim casing edges of plastic laminate faced doors to match colour of facing material including door lite frames.
- .9 When the primer sealer coat is dry, touch up all visible suction spots before the next coat is applied, do not proceed until all suction spots are sealed.
- .10 Unless otherwise specified finish closets and the interior of cabinets the same as adjoining surfaces of rooms.

- .11 Unless otherwise specified finish all other surfaces the same as the nearest or adjoining surfaces or as directed by the consultant.
- .12 Brush paint wood and metal surfaces.
- .13 Unless otherwise specified apply paint by roller or spray paint type equipment, unless the manufacturers' recommendations exclude use of these methods. Spray painting shall be airless type, and care shall be exercised to protect other surfaces and drift of paint fog.
- .14 Areas to be painted, including spray painted areas may be required to have two or more colours in one room.
- .15 Note many of the spaces within the building have exposed concrete plank ceilings with white wire mesh baskets that are suspended to conceal the various mechanical and electrical systems. The painting subtrade is required to supply and install paint to the underside of this concrete plank structure at all locations where the concrete planks are exposed to view and where the wall surface is partially concealed by the suspended wire mesh ceiling baskets.

#### 3.3 CLEANING

- .1 Final cleaning in accordance with Division 1
- .2 Be responsible for removing paint from finishes not intended to have paint on them.
- .3 Upon completion of work remove debris resulting from this work and leave areas neat and clean.
- 3.4 SCHEDULES
- .1 Refer to the room and door finish schedules for the locations of walls, ceilings, floors, doors, door frames in addition to other surfaces and items to be painted in the finished work.
- \_\_\_\_\_.2. Consultant has provided a list of colours within this specification.

## 3.5 FORMULAE

# .1 EXTERIOR SCHEDULE - refer to Room / Door Finish Schedule

Surface	No Coats	Material	Colour
1. Gas Meter Pipe <b>PT:</b> Yellow	1	-	Lid Guard 5206
on roof	2	exterior alkyd Gli	gloss id Guard 4500 series
2. Bollards <b>PT:</b> Red	1	oil alkyd primer Gl	d Lid Guard 5206
	2	exterior	
3. All Exterior Cano Steel <b>P1:</b> White	pies	Surface E Blast SSE	Prep: Commercial PC-SP6
	1		d evoe Ban-Rust 5 @ 4-6 mils dft
	2	exterior Devoe Deu Urethane coat.	
Refer to attached ICI Devoe Coatings specification sheet regarding paint application to Structural Steel Canopies			

4. Lintels	1	Wash with Xylene
Hot Dipped Galvanized		( on entire building including
		curved apparatus door arches )

Surface No Co	bats	Material Colour
1. Block Walls <b>PT-1:</b> Light Grey	1	Block filler 1GP188 Glidden 36250 product 100 filled
	2	Glidden Ultra 94410 1GP57 # 79-46
Washrooms / Kitchen <b>PT-1:</b> Light Grey	1	Block filler 1GP188 Glidden 36250 product 100 filled
	2	Gloss enamel 1GP59 Glid Guard 4500 series
2. Drywall Bulkheads <b>PT-2:</b> Light Grey	1	Latex Primer Sealer 1GP119 Glidden 36600 -
FI-Z. Light Grey	2	9450-0 # 79-46 Glidden 30YY55151
3. Cement Board Ceiling PT-2: Light Grey	1	Latex Primer Sealer 36600
Interior of Building	2	Gloss enamel 1GP57 Glid Guard 4500 series # white
4. Steel Deck / Roof Beams *** <b>PT-3</b> Dryfall Paint	1	Devguard Guard Metal Primer White #4120
	2	Glidden Dryfall flat alkyd Light Beige # 78-77
***	CONFIRM	COLOUR WITH ARCHITECT
5. Doors	1 2	Glid Guard metal primer Gloss enamel 1GP59
<b>PT-4:</b> Dark Grey	_	Glid Guard 4500 series 30YY551151 # 79-20
6. Door Frames	1 2	Glid Guard metal primer Gloss enamel 1GP59
PT-5: Grey		Glid Guard 4500 series 30YY551151 # 79-19
7. Block Walls <b>PT-6:</b> Blue	1	Block filler 1GP188 Glidden 36250 product 100 filled
	3	Semi-gloss enamel 1GP57 94410 # 77-52

# .2 INTERIOR SCHEDULE - refer to Room / Door Finish Schedule

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8. Block Walls <b>PT-7:</b> Dark Red	1 Glid 3	Block filler 1GP188 den 36250 product 100 % filled Semi-gloss enamel 1GP57- Glidden 94410 # 71-68	
9. Block Walls <b>PT-8:</b> Yellow	1 Glid 3	Block filler 1GP188 den 36250 product 100 % filled Semi-gloss enamel 1GP57- Glidden 94410 # 72-85	
10.Wood Benches / Shelves <b>ST:</b> Clear Urethane	1 2	Through out building Primer even coat / sand / clean / thinner 1:1 Glidden Gloss Urethane 90332	
11.Miscellaneous Steel angles, lintels, cast in place <b>PT:</b> match adjacent	1 2	Glid Guard metal primer match adjacent alkyd-semi 1GP57 Glidden 9440-0	
12. Interior Steel Mesh 1" x 1" Ceiling Baskets :			
PTW : Gloss White	1 2	Glid Guard metal primer Gloss enamel 1GP59 Glid Guard 4500 series 30YY551151	
13. Interior Steel Angle Brackets and Support Disks For Wire Mesh Ceiling Baskets :			
<b>Gloss Safety Black</b> <b>Confirm with Archited</b> ELECTRICAL BOX - GLOS		Glid Guard metal primer Gloss enamel 1GP59 Glid Guard 4500 series 30YY551151 JNTED TO BACK TO BACK RED ANGLES	
14. Ductwork / Electrical <b>PT:</b> Dark Grey	Conduit 1 2	Solvent Wash Galvanized Primer Devguard #4120 Semi-gloss enamel 1GP57 Glid Guard 4500 series # 79-01	

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SC: SEALED CONCRETE Light Grey	Scrub / Rinse with clean water / dry Sealtight Peneseal Epoxy concrete sealer by W.R. Meadows Data Sheet 3900-582 (refer to enclosed spec sheet for manufacturer's installation recommendations)
<pre>16. Concrete Floors 1 CHB: CONCRETE HARDENER SEALER Light Grey Level 1 Apparatus Area 2 + Turn out gear room + Maintenance Shop Refer to Room Schedule</pre>	Acid etch concrete-muriatic Scrub / Rinse with clean water / dry Sealtight Peneseal Epoxy concrete sealer by W.R. Meadows Data Sheet 3900-582 (refer to enclosed spec sheet) The Premix Floor Hardener is supplied and installed by Section 03300 ( information
1	<pre>only ). Curing Compound Sealtight 1100 ( refer to enclosed spec sheet for manufacturer's installation recommendations ) Light broom finish desired to increase floor slip resistance</pre>

#### 3.6 SUPERVISION

- .1 Comply with the recommendations and directions of the manufacturer whose materials are being used.
- 3.7 EXAMINATION OF SURFACES
  - .2 Advise consultant of surfaces which are defective, or which cannot be prepared by this trade by usual sanding, puttying, filling and cleaning.
  - .3 Do not commence work on surfaces where defects exist, until corrective work has been completed to satisfaction of this trade and consultant.
- 3.8 PRIMING
- .1 Prime ferrous metal surfaces including, without being limited to, structural steel, mechanical and electrical equipment, piping and conduit that have not received a shop coat of paint, with a coat of lead, iron oxide primer or equivalent alkyd rust inhibitive primer compatible with finish coating.
  - .2 Prime galvanized or zinc coated surfaces including, without being limited to , steel deck, flashing, handrails, wire mesh and piping with one coat of galvanized steel primer compatible with the finish coating.
  - .3 Touch up with primer metalwork which has received a shop primer and which is to be finish painted, after loose paint and scale have been removed. Field prime over the shop coat immediately after erection of exposed exterior steel.
  - .4 Prime or seal with compatible primer/sealer, surfaces, immediately after delivery to the building, if the work has not already received a primer. Re-prime or reseal all edges of materials cut on job.
  - .5 Prime surfaces of concrete block with one coat of primer compatible with finish paint, unless block filler is specified under interior finishes when primer shall be applied over filler.
- 3.9 METAL WORK
- \_\_\_\_\_.1 Apply two coats of interior paint over the prime coat of all interior metalwork which will be exposed in the finished work other than stainless steel and other specifically included metals.
  - .2 Prime and paint exposed, unfinished electrical components and accessories, and only under the direction of electrical tradesmen.
  - .3 Replace identification markings on mechanical and electrical work when painted or spattered.

- .4 Remove grilles, covers and access panels for mechanical and electrical systems from installed location and paint separately, if these items are not already factory finished. Access panels in drywall ceilings will match colour of ceiling.
- .5 Paint interior semi-concealed surfaces of air ducts that are visible through grilles and louvres with one coat of flat black metal paint to limit sight line where wall or ceiling is scheduled to receive painter's finishes.
- .6 Apply painter's finishes to paintable exterior piping, vents, roof mounted equipment and similar mechanical and electrical items including galvanized, copper and primed surfaces.
- .7 Paint all exposed surfaces of insulated and non insulated piping equipment, and flashing not prefinished in finished areas, and all items on roof.
- .8 Paint electrical and telephone backboards to match wall colour.
- 3.11 **PARKING LINES AND SYMBOLS** refer to Architectural Drawing A-1 for Fire Station and Lot Painting. Yellow Line Painting.
  - .1 Lay out geometric symbols, designs, lettering and 4" wide lines as shown and to Consultant's later detailed Drawings using layout and drawing devices which ensure accurate work. Apply yellow paint to asphalt surfaces after receiving approval from consultant to proceed.
  - .2 Architectural Site Plan locates placement of line painting, Blue handicapped logos, yellow lettering and directional arrows.
  - .3 Use templates designed for the purpose, for each symbol to create clean, crisp image depicted on site plan. Install masking accurately to line required, and obtain permission from Consultant prior to commencement of painting.

## 3.11 ACCEPTANCE

.1 The architect shall have the right to judge the acceptability of all paint finishes ( interior and exterior ), if declared unacceptable, repaint at no additional cost. Electrical cover plates, finishing hardware to be removed and nearby furniture protected prior to painting. Any paint found on surfaces other than those specified to receive paint will be removed by the painting contractor at no expense to the owner.

# END OF SECTION