



CI-0701

TAB 7: TECHNICAL DISCIPLINES
Architectural

FINISHES

BASIS OF CRITERIA



FINISHES

Floor finishes shall be non slip and shall retain their slip resistance under both wet and dry conditions. Where floors are carpeted, the carpet is of firm, dense construction and easy for a wheelchair user to roll over without difficulty. Thresholds shall be bevelled to accommodate different floor materials.

Walls in busy areas, corridors, ramps or staircases shall be finished in smooth, non-glossy, non-abrasive finishes. Colour of doors or door frames in hallways shall contrast with surrounding wall colours.

Fire exit doors, fire hose cabinets and fire extinguishers shall be consistently coloured in a high contrast colour throughout the building, so that they are easily distinguishable.

SYSTEM IMAGE

Materials shall suit the overall GO operations context. In order to maintain a unified system image and to control capital and operating costs, all materials shall be selected from a family of materials as follows:

AVAILABILITY OF MATERIALS

Materials selected shall have matching replacement stock available for the expected life of the material.

APPEARANCE OF MATERIALS

Materials selected shall:

- > Be visually and tactilely pleasing;
- > Avoid creating floor patterns that are disorienting to patrons moving across them due to high contrast or distracting patterning;
- > Facilitate passenger guidance, information, safety, and security in a manner that contributes to overall design excellence; and
- > Be selected so the colour is consistent with system-wide identity colours, be compatible with the facility's surroundings, and of sufficient contrast and accent to attract the eye, convey feelings of warmth, and conceal minor soiling.



CI-0701

TAB 7: TECHNICAL DISCIPLINES

Architectural

SAFETY

- > Materials shall be selected so as to reduce the risk of hazard to patrons and maintenance staff and shall have the following safety considerations:
- > Fire resistance of facilities shall be maximized, and smoke generation hazard from fire shall be reduced, by using finish materials with minimum burning rate, smoke generation, and toxicity characteristics consistent with Code requirements.
- > Proper fasteners and adequate bond strength shall be used to minimize hazards from dislodgment due to temperature change, vibration, wind, seismic forces, aging, or other causes, such as vandalism.
- > Floor materials with non-slip qualities shall be utilized to increase pedestrian safety and accommodate the needs of individuals with disabilities.
- > Stairways, walkways, platform edge strips, and areas around equipment shall have high-friction, non-slip properties. All specified floor materials shall be resistant to damage from common de-icers.

SUSTAINABLE DEVELOPMENT

- > Material selection, where possible, should reflect green initiatives of sustainable development. Although GO buildings are not LEED accredited, general compliance is encouraged.

DURABILITY AND PERFORMANCE

Following are standards and guidelines for selecting materials for durability and adaptability:

- > Materials with excellent wear, strength, and weathering qualities shall be used, and shall be generally durable and hard-wearing with due regard to both initial replacement costs and required maintenance.
- > Materials shall maintain their good appearance throughout their useful life and shall have a minimum twenty-five (25) year performance capability.
- > For ceiling and canopy finishes/systems and their application, materials shall allow for commissioning, adjustment, and future retrofitting of subsystems such as CCTV and public address systems.

Materials should also be:

- > Easily maintainable and repairable.
- > Of high quality and installed at high levels of workmanship.



CI-0701

TAB 7: TECHNICAL DISCIPLINES

Architectural

- > Selected with consideration to the total acoustic environment, so as to minimize reverberation while meeting other design and performance criteria.
- > Selected with respect to costs by balancing initial material costs against long-term maintenance costs.
- > Easily replaced/repared, such as by including a wear surface separate from the structural slab to facilitate replacement when a floor is in a heavy wear area.
- > Chosen, where appropriate, with reference to the potential need for access to service ducts, etc.
- > Shall be chemically inert, acid and alkali-resistant, dense, non-porous and non-staining.
- > All materials shall be able to withstand corrosion and uphold its intended use and function, and maintain its appearance (no rusting or fading in colour).

MAINTENANCE AND CLEANING

Finishes shall be selected for ease of cleaning, repair, or replacement.

The following provides further direction regarding maintenance of materials:

- > Materials shall resist soiling and be cleanable with commonly used equipment and environmentally benign cleaning agents.
- > Platform enclosures, tunnels and walking surfaces shall utilize materials that are not damaged by pressure washing.
- > Access to windows for cleaning shall not be obstructed except where absolutely necessary (required structural member, etc.). Windows above ground level should be placed such that they can be accessed from below using a lift, and accessing windows for cleaning should not require getting into traffic or onto tracks.
- > If cleaning or replacing windows or maintaining a structure requires access by rappelling down the side of the structure, then safety tie-off anchors shall be provided per code.
- > To reduce inventory and maintenance costs, materials shall be specified that are readily available and can be easily repaired or replaced without undue cost or interference with facility operations.

UNIT SIZE

- > Units shall be large enough to reduce the number of joints yet small enough to facilitate replacement if damaged.



CI-0701

TAB 7: TECHNICAL DISCIPLINES

Architectural

- > Standardized grids should be designed wherever possible to accommodate for standardized glazing for windscreens and vertical elements of shelters.
- > Elevator glazing shall meet dimensional standards whenever possible.

APPROVED STANDARDS

- > Selected materials shall be CSA approved and meet ULC or other appropriate standard.

INSTALLATION AND APPLICATION

- > Materials shall be detailed and specified to be installed in accordance with industry standards and manufacturers printed directions for long life, low maintenance, and compliance with warranty requirements.
- > All materials shall be installed using tested and proven methods, in accordance with established trade standards.
- > All materials, hardware and fasteners shall be able to withstand the anticipated pressures of ground-borne vibration, as well as air pressure changes generated by wind and by the passage of the GO Transit vehicle.
- > Whenever possible, wearing surfaces in public areas shall be designed and installed in unit sections separate from their structural bed, to facilitate removal for repairs and/or replacement.
- > All materials shall be secured in a manner which deters and prevents tampering and vandalism.
- > Installation of materials shall generally facilitate their removal without affecting the integrity of adjacent materials.

COLOUR, PATTERN, TONAL CONTRAST AND TEXTURE

- > Colour, pattern, tonal contrast and texture may be used in stations providing they do not conflict with other functional requirements of the station.
- > Colours shall exclude dedicated corporate and signing colours except for those purposes. They shall be sufficiently reflect to contribute to the overall lighting of the station.
- > Use noticeably different colours to distinguish the different key building elements. The recommended colour and brightness contrasts of key building elements by the Accessibility Standards Is 70% or more.
- > Some good colour contrasted combinations as recommended by the CNIB are: Black/white ; Yellow/black; Chocolate brown/ white; Dark blue/white; Dark red/white; Dark green/white; Dark purple/white; Orange/black



CI-0701

TAB 7: TECHNICAL DISCIPLINES

Architectural

- > Integral and applied colours shall be selected which resist undue fading in the environment in which they are used.
- > Textures shall not conflict with those used in the information and guidance system. Those subject to direct contact by passengers shall not be abrasive.
- > The effect of textured surfaces on lighting and acoustics shall be considered.
- > Materials with staining and colour shall have through-colour properties and non-fading characteristics to maintain their appearance and true colour over time.
- > Finishing of steel shall be appropriate to the location of the material, i.e. exterior vs. interior.
- > All interior finish steel (such as handrails) shall be stainless steel unless otherwise noted.
- > All exterior finish steel shall be stainless steel or galvanized. Anchors and fasteners as required shall match with fixture. Mixing of materials is not recommended.
- > Finishing of steel in the field shall be kept to a minimum by designing structures that can be shop fabricated in sections, primed, and finished in the shop, and bolted together on site. Designers shall minimize field welding and touch up galvanizing and painted wherever possible.
- > Any galvanized metals to receive a paint finish shall be factory primed and painted. Field painting on site is not acceptable.
- > Finishing of steel shall be completed with satin finish and high performance coatings wherever possible. Finishing of steel in the field shall be kept to a minimum by designing structures that can be shop fabricated in sections, primed and finished in the shop, and bolted together on site. Designers shall minimize field welding and touch up galvanizing and painting wherever possible.
- > Glare and unnecessary reflectance from building surfaces shall be avoided.

PUBLIC AREAS – GENERAL CRITERIA

- > Sound attenuating materials shall be used as required to minimize noise levels.
- > Public areas are subject to intensive use and hard wear. They shall be divided into high and low contact zones to identify those areas particularly susceptible to public contact.

HIGH CONTACT ZONE

- > This zone covers areas within normal passenger reach and extends from the floor, up to 2.5 m above the floor.
- > Ceilings less than 3.8 m shall Also be treated as High Contact Zones.



CI-0701

TAB 7: TECHNICAL DISCIPLINES

Architectural

- > The selection of materials for use in this zone shall reflect outstanding durability, especially in and around passenger circulation routes or public amenities.
- > Finishing materials used in the lowermost 500 mm of this zone must be unaffected by salt and slush, and shall be capable of being quickly and easily cleaned.
- > Edges of finishing materials shall be reinforced where vulnerable to damage. This includes platform edges, stair nosings, outside corners and projecting sills.
- > Paint applied to walls, ceiling, etc. shall be graffiti-resistant.
- > Hardware and fastenings in this zone shall particularly discourage tampering.

LOW CONTACT ZONE

- > This zone is less susceptible to public contact and extends up from 2.5 m above the finished floor.
- > Materials in the Low Contact Zone are subject to less convenient service access, and are still vulnerable to vandalism, dirt and grime.