



ISO 9001 : 2000

THERMOSTOP INC., 3775 Losch, Longueuil, Québec, Canada, J3Y 5T7, Tél. : (450) 678-8666, Fax. : (450) 678-7765

STANDARD SPECIFICATIONS
GLACE-GUARD™ MARK
Section 08326: Cold Storage Doors

PART 1 – GENERAL

1.1 Works by others :

- Metal fabrication, section 05500
- Electrical power supply, division 16
- Structural work, division 5

1.2 Construction requirements :

- Design doors to withstand wind load of 21 psf (velocity of 90.5 miles/hour) with a maximum horizontal deflection of 1/120 of opening width
- Design doors to withstand a temperature range of -20°F to +120°F (-29°C to +49°C)
- ASTM E-283 (air leakage) : less than 0.130 cfm/ft² at 25 miles/hour
- ASTM E-547 (water penetration) : absolutely no leak

1.3 Shop drawing: Supply shop drawings in accordance with plans and specifications for approval. Contractor shall be responsible for job site dimensions before fabrication and co-ordination with others sub-trades.

1.4 Maintenance instructions: Supply maintenance instructions for hardware and/or others components in accordance section 01300.

1.5 Warranty: Thermostop doors and hardware carry a warranty of one (1) year against any defect or faulty workmanship.

PART 2 - PRODUCT

2.1 Material :

- Pre-painted galvanised G-60 metal sheet conform to ASTM A653
- Commercial aluminium extrusions 6063 T5
- Insulation: foamed in place polyurethane, 2.56 lbs/ft³ (41.0 kg/m³) minimum density, conform to CGSB 51-GP-21M.

2.2 Reference product : Glace-Guard™ Mark III (3”), Glace-Guard™ Mark IV (4”), as manufactured by THERMOSTOP INC., 3775 Losch boulevard, Longueuil, (Québec), Canada, Tel.: 450-678-8666, Fax: 450-678-7765, www.thermostop.com

2.3 Dimensions and clearances :

| | | |
|-----------------|-------------------|------------------------------|
| <u>Quantity</u> | <u>Dimensions</u> | <u>Clearances</u> |
| | (height x length) | (floor to first obstruction) |

2.4 Temperature range: -20° F to +120° F (-29° C to +49°C) for typical applications of

Cooler: 35 °F @ 40 °F / 2°C @ 5°C

Freezer: -20 °F @ 32 °F / -29°C @ 0°C



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- 2.5 Size:**
Up to 28'0" W. X 28'0" H. (8534mm W. X 8534mm H.)
- 2.6 Thickness:**
3" (75mm) thick : Glace-Guard™ Mark III
4" (100mm) thick: Glace-Guard™ Mark IV
- 2.7 Panel manufacturing process:** The inner core consists of rigid polyurethane, foamed in place under high pressure between two metal skins. The panel is equipped, on its full length, with 20ga. steel (0.86mm) continuous reinforcement plates, for the solid attachment of hinges. To avoid mouldiness, no wood material is used in the construction of the panel.
- 2.8 Insulation:** CFC-free rigid foamed-in-place polyurethane. 2.56 lbs/ft³ (41.0 kg/m³) minimum density . Insulation value is equal to R-8 per inch (25,4mm) thickness of insulated panel, R-24 for a 3" (76 mm) thick insulated panel and R-32 for a 4" (102 mm) thick insulated panel.
- 2.9 Joint and seal:** High quality galvanized steel skins roll formed into an exclusive tongue-and-groove joint with a true thermal break and a double bubble-shaped weather seal.
- 2.10 Thermal break:** To eliminate all possibilities of thermal conductivity, a true thermal break of
- o 1 ¾" (43 mm) for the 3" thick door
 - o 2 ¾" (68 mm) for the 4" thick door
- separates the exterior skin from the interior one.
- 2.11 Metal skins and finish:**
Standard 26ga. steel skins, white stucco finish. White.
Optional:
Steel skins: 20ga. and 16ga. For more details and information, see brochure **Glace-Guard Mark**.
Aluminum skins: 24ga. and 16ga. For more details and information, see brochure **Glace-Guard Mark**.
- 2.12 Face frame and back frame (optional):** Vertical and horizontal face frame and/or back frame made of ¾" water-resistant plywood in double layer, clad with white galvanized steel.
- 2.13 Heat trace (optional):** For freezer applications, the door is equipped with a self-regulated heat trace on its four sides, to prevent ice or frost accumulation and to avoid the need of a heated threshold.
- 2.14 Window (optional):** Sealed glass or acrylic glass 12" x 24" (305mm x 610mm) windows. Optional heated sealed glass for freezer application.
- 2.15 Perimeter weather seal:** triple-lip, flexible PVC weather seal, retained in an extra robust extruded aluminum retainer.
- 2.16 Bottom weather seal:** U-shaped, flexible PVC double weather seal, retained in a heavy duty extruded aluminum retainer, securely fastened to the bottom of the door.
- 2.17 End caps:** Sections are equipped with 16ga. (1.42mm) thick galvanized steel end caps.



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PART 3 – HARDWARE

Recommended models for 10 000 cycles springs:

- Up to 16'0" (W.) x 16'0" (H.): Hardware model 80-T
(see brochure **Hardware – Thermostop Industrial Doors**)

For more than 10 000 cycles springs and door size of more than 16'0" (W.) x 16'0" (H.), please consult with Thermostop Inc.

PART 4 – ELECTRICAL OPERATOR AND ACCESSORIES

4.1 The door will be equipped to be operated either by :

- manually with a handle and a sash cord
- or manually with a handle and a pull chain
- or with a chain hoist, recommended for doors over 12' (W.) x 12' (H.)
- or with an electric operator

4.2 Electric operator: Centrally mounted "Trolley" motor (for standard lift or low headroom tracks only) and side mounted "Jackshaft" motor.

Recommended models for 10 000 cycles springs:

- Up to 16'0" (W.) x 16'0" (H.): electric motors XTRA-H
(See brochure **Operators – Thermostop Industrial Doors**)

For electric accessories and their corresponding options such as push button control stations, radio controls, magnetic loop detector, motion detector, safety edge, utility switch, time delay, closing timer etc., please consult brochure **Operators – Thermostop Industrial Doors**.

For more than 10 000 cycles springs and door size of more than 16'0" (W.) x 16'0" (H.), consult with Thermostop Inc.

PART 5 – INSTALLATION

5.1 Install doors and hardware in accordance with manufacturer's standards.

5.2 Touch-up doors with primer where galvanized finish is damaged during fabrication.

5.3 Install electrical motors, controller units, push button stations, relays and other electrical equipment required for door operation.

5.4 Lubricate springs and adjust door operating components to ensure smooth opening and closing of doors.

5.5 Adjust weather stripping to form weather tight seal against the elements.