

**STANDARD SPECIFICATIONS**  
**THERMOSTOP AL-2000**  
Section 08 34 19: Industrial 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 1 kPa (velocity of 145 km/hour) with a maximum horizontal deflection of 1/120 of opening width
- Closed tubular aluminum extrusions
- Male-female tongue-and-groove joint

**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. The door panels carry a ten (10) year limited warranty against perforation due to rusting, and a five (5) year limited warranty on delamination, under normal operational conditions.

**PART 2 - PRODUCT**

**2.1 Material :**

- Commercial anodised 16GA aluminium sheet
- Commercial mill finish 16GA aluminium sheet
- Commercial anodised 6063 T5 aluminium extrusions
- Anodized finish :
  - clear : to meet AAM12C22A31 standard
  - color : to meet AAM12C22A34 standard

**2.2 Reference product :** Thermostop AL-2000, type A1, A2, A3 or A4, or type B1, B2, B3 or B4, 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 Manufacturing process:** All tubular extrusions are assembled by means of full-length through bolts. Welding shall not be permitted in any part of the process.

**2.5 Joint and seal:** High quality galvanized steel or aluminum skins roll formed into an exclusive tongue-and-groove joint equipped with a foam weather seal.

**2.6 Thickness:**  
2" (50mm) thick.

**2.7 Extrusions dimensions**

- intermediate vertical mullion: 1 3/4" (44 mm)
- end vertical rail: 2 5/8" (67mm) or 5 3/8" (137mm)
- top horizontal rail: 2 5/8" (67mm) or 5 3/8" (137mm)
- bottom horizontal rail: 2 5/8" (67mm) or 5 3/8" (137mm)
- male horizontal rail: 1 1/8" (29mm)
- female horizontal rail: 1 1/2" (38mm)

**2.8 Glazing:** Glazing sealed with watertight closed-cell foam tape and securely retained in place with a rigid vinyl snap-on moulding.

**Options :**

- 1/8" (3mm) single glass
- 5/8" (16mm) sealed glass
- tinted glass
- tempered glass
- polished wire glass
- low-E glass
- SDP-16 polycarbonate

**2.9 Solid sections:**

**Type A1 or A2 or A3 or A4:** 16ga. (1.30mm) thick aluminum panels, smooth clear anodized finish, set in U-shaped vinyl gaskets and securely retained in place with a rigid snap-on moulding.

- **single** (single aluminium sheeting)
- **insulated** (sheeting/insulation/sheeting combination)
- **kick-proof** (sheeting/reinforcing panel/sheeting combination)

**Type B1 or B2 or B3 or B4:**

- **Type B1-B2:** Mark II-266, 26ga. steel or Mark II-244A, 24ga. aluminum, white stucco finish
- **Type B1-B3:** Mark II-244A, 24ga. aluminum, grey RAL-9006, stucco finish
- **Type B1-B4:** Mark II-166A, 16ga. aluminum, clear anodized, smooth finish

**2.10 Finish:** Standard clear anodized finish for aluminum extrusions and 16ga. (1.30mm) paneled sections. Optional 1) color anodized finish 2) shop painted, color to be selected from the SICO or the RAL color chart.

**2.11 Reinforcement:** When required, the horizontal members shall be adequately reinforced with integral reinforcing fins and aluminum "T" struts. No steel reinforcing struts shall be permitted.

**2.12 Perimeter weather seal:** triple-lip, flexible PVC weather seal, retained in an extra robust extruded aluminum retainer.

**2.13 Bottom weather seal:** U-shaped, flexible PVC weather seal, retained in a heavy duty extruded aluminum retainer, securely fastened to the bottom of the door.

### **PART 3 – HARDWARE**

Recommended models for doors with 1/8" (3mm) single glass glazed sections:

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

For door size greater 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 motor XTRA-H or XTRA-T  
(See Operators – Thermostop Industrial Doors)
- More than 16'0" (W.) x 16'0" (H.): electric motors XTRA-HHD  
(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 door size greater 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 weatherstripping to form weathertight seal against the elements.