



# ALUMINUM DOOR & LEXAN COMBINATION

## ARCHITECTURAL SPECIFICATIONS

Aluminum Door & Lexan Combinations furnish the structural integrity of the Aluminum Roll-Up Door while providing the visibility of the Lexan Roll-Up Door without compromising superior security. This combination allows us to produce a product that can be manufactured to fit openings of up to 70' in width, and to meet a diversity of commercial and residential requirements ranging from banks to high-level security buildings.

Operation can be manual, chain hoist, crank or motorized.

### PART 1 GENERAL

#### 1. Work Included

Aluminum Door & Lexan combinations will be designated as Model AR/AL\_\_ as manufactured by Best Roll-Up Door, Inc.

- **Mounting:** The door can be face mounted or mounted between jambs of a prepared opening.

#### 2. Related Work

Opening preparations, miscellaneous or structural steel, field painting or finish, access panels, electrical wires, wiring, switch connection, conduit will be handled by the appropriate trades.

### PART 2 PRODUCT

#### 1. Curtain

- **Curtain:** The curtain shall be a combination of alternating "Solid aluminum slat section" and "Lexan aluminum panel section". Lexan part of the curtain construction consists of aluminum panels extruded in continuous lengths of 6063-T6 anodized aluminum, cut to specific sizes for proper design and operation, interlocked alternately with solid Lexan (poly-carbonate) panels to form curtains.

Aluminum Roll-Up Door part of the curtain construction consists of extruded aluminum in continuous lengths of anodized 6063-T6 grade, dual-faced configuration, interlocked to form curtains.

- **Gauge:** Aluminum slat thickness shall be no less than 16 gauge and no more than 8 gauge on each side of dual-faced slats. Dual-faced aluminum panels shall have thickness of 16 gauge on each face. Lexan panels shall have thickness, where it is the minimum, of 0.15625" and, where it is the maximum, of 0.40625".

- **Endlocks:** To accomplish slat alignment and serve as a wearing surface endlocks are fitted to each end of alternate slats.

- **Anodizing:** All aluminum parts are anodized. Mill finish and shiny bright-dip anodized finish is also available.

#### 2. Bottom Track

Curtain is reinforced with an extruded 6063-T6 aluminum tube that can be further reinforced for wider openings.

#### 3. Guide and Wall Angle Assembly

- **Guides/Wall Angles:** Extruded aluminum channels at both sides shall serve as guides. Wall Angles shall be either aluminum or steel with minimum thickness of 1/8". Structural steel tubes can be used in lieu of wall angles. Guide weatherstripping on inside and outside shall be provided.

- **Depth of Guide:** To be of appropriate size to allow slat penetration and to restrict horizontal slat movement.

#### 4. Bracket Plates

# ALUMINUM DOOR & LEXAN COMBINATION

B

- **Bracket Plates:** To support the curtain and the counterbalance, the bracket plates shall be provided with minimum thickness of 1/4".
- **Drive End Bracket Plate:** The bracket plate on the drive end is to be fitted with a sealed ball bearing.

## 5. Spring Counterbalance

- **Counterbalance:** Housed in a steel pipe, maximum deflection of 0.03" per foot of door width is achieved by having the appropriate diameter and wall thickness.
- **Springs:** Helical torsion with a 25% overload factor for ease of operation and are greased packed mounted on a cold rolled steel inner shaft.
- **Spring Tension:** Can be adjusted from outside of end bracket plate.

## 6. Hoods

- **Hoods:** To completely enclose curtain and counterbalance, hoods shall be provided from #24 U.S. Gauge galvanized steel.
- **Reinforcing:** Can be reinforced laterally to prevent sag.
- **Intermediate Hood Supports:** Provided where door width exceeds 16'.

## 7. Operation

Can be manual push-up, chain hoist, awning crank, or power operated.

## 8. Locking

- **Integral Gearing:** Power operator can provide additional locking for door.
- **Hand Chain Lock:** Consists of a locking bracket mounted on a guide angle.
- **Cylinder Lock:** System is installed in bottom track and can be key or thumb knob operated.

## 9. Finish

Aluminum surfaces are anodized and can be powder coated upon request.

## ■ PART 3 EXECUTION

**INSTALLATION:** Installation to be completed by an authorized representative.

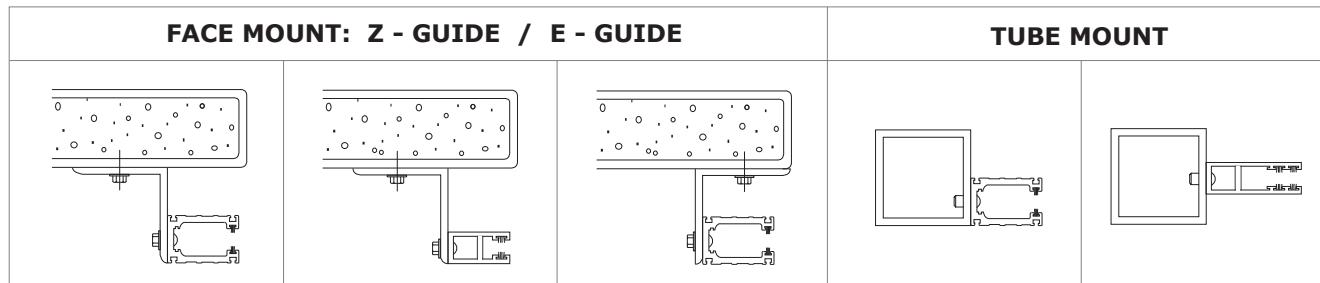
## OPTIONS

- **Bottom Track:** It can be sloped to match the contour on finished floor or can be notched to match obstruction on finished floor.
- **Aluminum Surfaces:** Aluminum surfaces can be mill finish or anodized in black, bronze, gold, red, green, blue or white colors. Powder coating in a variety of colors is also available.
- **Locking:** Thumb turn/key cylinder locks and multi-cylinder locks are available.
- **Sensor Edge:** An electronic sensor edge can be added to power operated doors to reverse the door travel upon encountering an obstruction for safety.
- **High Cycle Springs:** Can be obtained for motorized doors that require 50,000 to 100,000 cycles. Very high cycles in excess of 100,000 are also available.
- **Bracket Plates:** Can be made from galvanized or stainless steel.
- **Guides/Wall Angles:** Can be galvanized steel or aluminum.
- **Pass Door:** Hollow metal pedestrian door within roll-up door can be obtained in a 3' x 7' or 3' x 6' 8" size. Hinged to roll-up door guide the hollow metal door frame will swing clear of opening when desired. Hardware includes heavy duty hinges and handicap-level lock set.
- **Weatherstripping:** Weather-striped guides from both inside and outside are provided as standard. Sill and hood weather-stripping is also available.

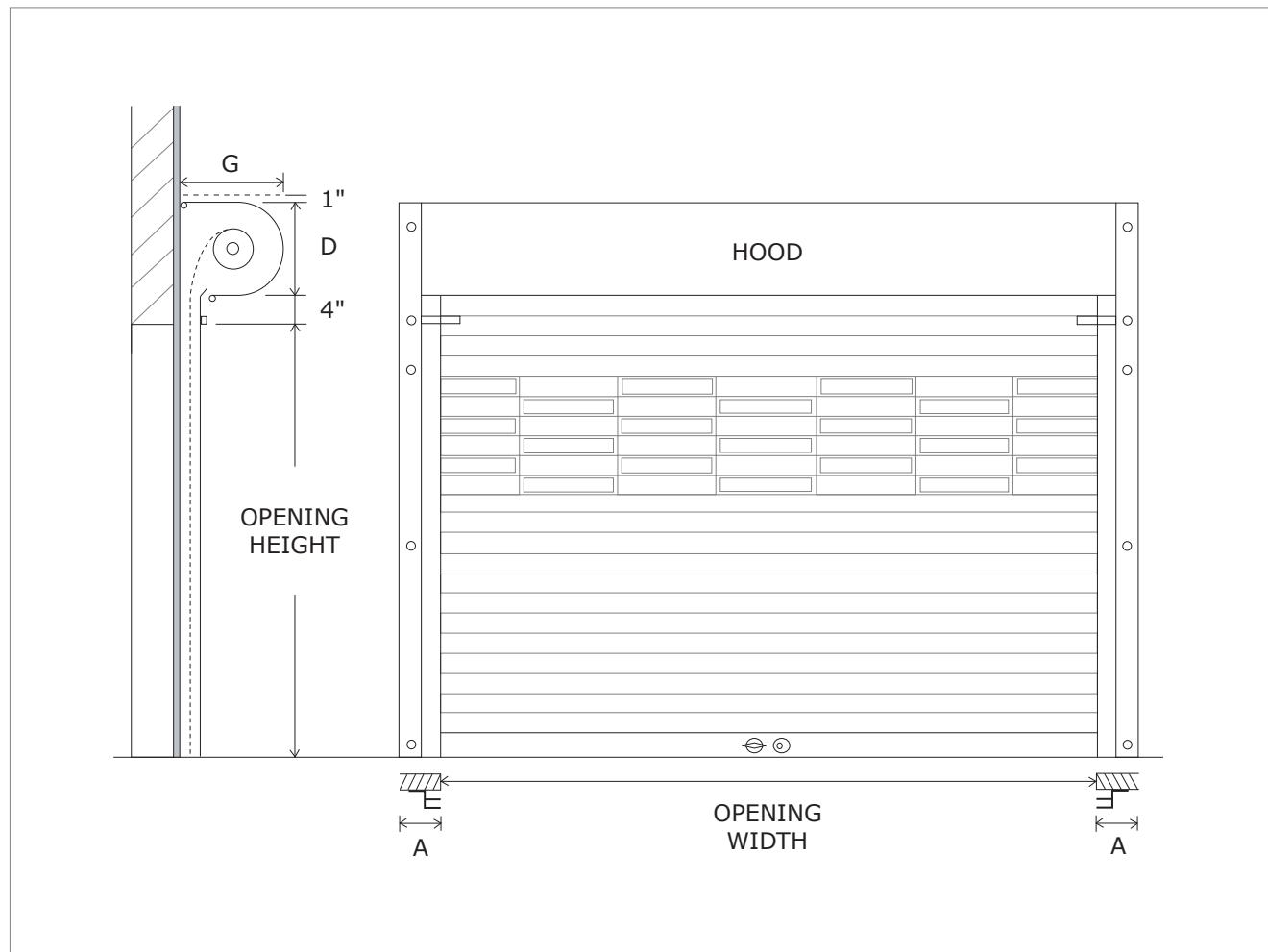
**B**

# ALUMINUM DOOR & LEXAN COMBINATION

## ■ MOUNTING TYPES



## ■ FRONT VIEW



## ■ CLEARANCES

OPENING HEIGHT	A	D	G
All Heights	Consult Factory	Consult Factory	Consult Factory

# ALUMINUM DOOR & LEXAN COMBINATION

B

