# Envir-A-Shutter® ALUMINIUM INSULATED SHUTTER (RASE)



The Envir-A-Shutter is made up of a number of slats that are hinged together and move vertically in the opening, then roll around the torque tube, guided by tracks and aided by springs.



A1 Alloy 3005 H18. This material features extensive rigidity of 205Mpa and yield strength of 187Mpa. The proportion of filled foam is  $32 \text{kg/m}^3$ . Dimensions: 19mm thick and nominal effective slat width of 77mm.

SIZE	MINIMUM DOOR SIZE	MAXIMUM DOOR SIZE		
HEIGHT	1900mm	5500mm		
WIDTH	1900mm	5500mm		

#### **BOTTOM RAIL**

Extruded aluminium box section bottom rail. Top edge formed to interlock with the bottom slat of the shutter.

Taper: No.

Weatherseal: Standard.

#### **GUIDES**

A1 alloy, powder coated white extruded aluminium channel with brush inserts. 35mm (h) x 115mm (w).

# **TORQUE TUBE**

Torque tube is 203mm diameter. Wall thickness 1.6mm galvanised steel, to withstand a minimum deflection of 1:350mm. Torque tube fitted with 30% glass filled polypropylene homo-polymer plastic drums mounted on 33.7mm axle, having minimum thickness 4.0mm.

#### **SPRINGS**

Helical torsion type drum springs, made from hard drawn range 2 spring steel. Spring life 10,000 cycles.

#### **BRACKETS**

Mild steel angle to be used with double saddles and 100mm high tensile steel bolts.

#### LOCKING

No locking is normally provided.

Options: Aluminium slide bolts for use with padlocks.

Chain lock cleats for chain operated and bottom rail centre lift lock for manual operation.

Locking is never recommended for use with motorised operations.

#### THERMAL INSULATION VALUE

R value = 0.25w/m<sup>2</sup>/R

# **FINISHES**

Available in three standard colours: Off white, Pewter and Cream. Powder coating is also available.

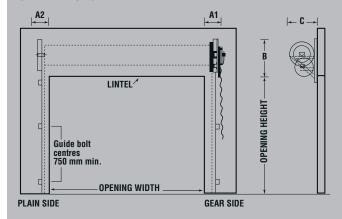
# OPTIONS

Ventilation: No. Mullions: No.

Personnel access: No.

Vision slats with removable perspex inserts for ventilation.

# **CLEARANCES**



#### STANDARD PARAMETERS FIXING

Curtain width = Opening width + 120mmDrum length = Opening width + 220mmAxle length = Opening width + 720mm

# **DIMENSIONS**

Opening Height	A1	A2	В	B min	C	Approx. Weight (Drums & Curtain)	
Planetary gear drive for doors under 4500mm high or wide							
2200mm	280	190	630	580	405	110kg	
3000mm	280	190	680	630	455	160kg	
3600mm	280	190	700	650	475	200kg	
Hand winder drive for doors over 4500mm high or wide							
4500mm	260	190	720	670	495	280kg	
5500mm	260	190	720	670	495	360kg	

All clearances are in mm.

Information relating to product measurements, colours and specifications is accurate at the time of print and is subject to slight variations resulting from the manufacturing process. B&D reserves the right to change product specifications at any time. Installation measurements are approximate and may vary depending on application and other factors, including the opening and structure. Take care when handling and storing slats. Damage to the slats can affect door performance.

Installation should only be performed by a professional garage door installer. Installers should refer to the instruction manual for this product prior to commencing installation. The instruction manual contains important safety and other information that must be followed when installing the product.