

# b d 8 Series Roll A Shutter Direct Lift Instruction Manual

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b d 8 Series Roll A Shutter Direct Lift



These instructions are intended for professional garage door installers. All references are taken from inside looking out.

# before you start

## installation safety warnings

This B&D Roll-A-Shutter is designed and tested to provide security, attractive appearance and smooth, low effort operation provided it is installed and operated in strict accordance with the following safety warnings. Failure to comply with the following instructions may result in death, serious personal injury or property damage.

**NOTE:** No guarantee will be given or responsibility accepted by the manufacturers if the door is not installed as instructed.

## **WARNING!**

Crush injury from unsecured door

- Place a 2 metre exclusion zone around area under the garage opening while installing shutter. If sufficient area is not available DO NOT install shutter.
- Do not move under a shutter while it is on the lifting device.
- Follow the installation instructions.
- Fit lifting device snugly under shutter before lifting.
- Ensure lifting device is on flat ground.
- Ensure the drum is immediately fastened to the bracket with bearings provided.
- Ensure no-one walks under a shutter sitting on brackets.
- Ensure shutter is correctly secured at all times when making adjustments.
- Ensure the correct length pipe wrench is utilised.
- Ensure that pipe wrench is fitted correctly to the axle and if it is gripped onto the axle do not underestimate the tension in the spring when undoing the clamps.
- Ensure correct bolts are tightened or loosened to ensure there is no release or controlled release of energy from the spring through the pipe wrench.
- · Keep head clear of the pipe wrench at all times.

#### **ELECTROCUTION!**

- · Check risk assessment for any highlighted electrical power concerns.
- Ensure power source is isolated prior to commencement of job.
- · Turn off electricity to site when necessary.
- Wear rubber soled footwear.

#### LACERATION:

- Wear appropriate PPE (Dyneema cut off gloves) and keep hands well clear of pinch points.
- Follow instructions explicitly, particularly for the installation of some parts of the doors, as the unrolled cut out edges presents a very sharp edge.

### **CAUTION:**

- Practice correct lifting techniques when required to lift the door.
- Use mechanical aids such as lifting devices, forklift and cranes where possible.
- · Avoid twisting.
- Use correct technique of knotted rope installation aids.
- Ensure boom lift is the correct type for job.
- Ensure boom lift is on flat firm ground that will take the weight without the structure sinking.
- Ensure user is connected by harness while on boom lift.
- Do not work outside of the boom lift cage.
- Wear appropriate PPE and utilise operators manual of all tools.
- Use appropriate noise/hearing protection in the form of ear plugs or ear muffs.
- Ensure appropriate fire protection available and housekeeping to ensure that flammable liquids or materials are removed from the area of work.

### TWO PERSON LIFT

- Keep hands and loose clothing clear of moving shutte and guides at all times.
- With the use of a mechanical aid this product requires a two person lift to raise onto the brackets. Use proper techniques and equipment to lift the shutter from the trailer and up onto brackets.

### substrate fastener recommendations

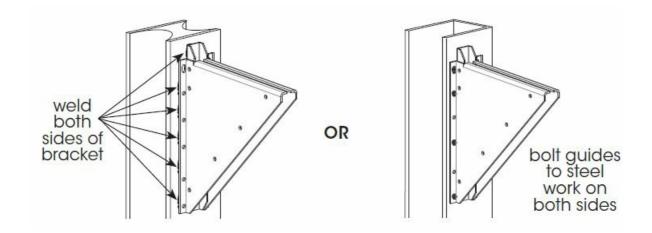
material	fastener type(s)	diameter or type		length of fastener (see note)	вкт	GUIDE
	HRD-VGK or HGK-VGS (Hex Head) Frame Anchors	10mm	X	60mm	•	
New Hollow Brick (core filled)	Screw masonary (flange hex head)	8mm	X	75mm	•	٠
1.8	Screw masonary (flange hex head)	10mm	X	75mm	•	٠
	Coach Bolts (Hex Lag Screw)	5/16"	X	11/2"		•
	- combined with wall plugs	3/8"	X	2"	•	
	Macplugs (wall plugs)	5/16"	Х	50mm		•
	to suit above	3/8"	X	60mm	*	•
New Solid Concrete	HLC Sleeve Anchors (Dyna Bolts)	12mm	X	55mm	•	
	Screw masonary (flange hex head)	8mm	X	75mm	•	٠
	Screw masonary (flange hex head)	10mm	X	75mm	•	•
		E /3 / "		7.//		
7.24 372700 300-	THE PARTY OF THE P	5/16"	X	1″		•
Steel Framing	Hex Head Bolt Zinc Plated,	3/8"	X	1"	•	•
e.g. BHP Framing (with rear access)	Hexagon Nuts Zinc Plated, Washers Zinc Plated	10mm	X	25mm	٠	•
		12mm	X	25mm	•	
Heavy Gauge Steel	Hex Head Tek	14-20	X	22mm	•	•

- WARNING! The installer must select and use fasteners appropriate to the material into which they are being fixed.
- **WARNING!** Refer to the weight label on the packaging or the B&D Product Guide to ensure the selected fastener is appropriate.

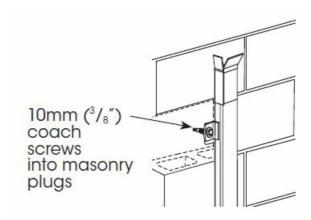
# important notes

- For installation to materials not covered in the chart, the installer should seek expert advice from a qualified builder.
- Minimum length of fastener does not exclude use of longer lengths. Decision must be made by fitter to ensure adequate strength.
- Recommendations for old materials or materials not in good condition are not included. If in doubt about the strength of the material seek specialist advice.
- Fasteners for brackets in masonry should be at least 5/16" x 2.5" long or metric equivalent.

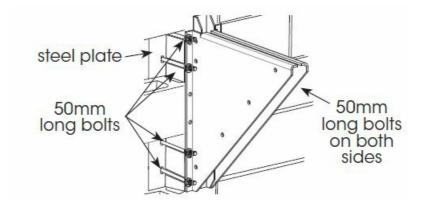
### STEEL CONSTRUCTION



### **SECURE GUIDE**



### MASONRY BLOCK CONSTRUCTION



**WARNING!** Masonry blockwork should be properly filled and reinforced if brackets are to be mounted directly to blockworkwith masonry anchors. Where the blockwork is not solidly filled but structurally sound, long bolts should be passed through the blockwork using suitable steel plates under bolt heads. Special consideration should be given to brick type and construction of wall, to ensure satisfactory fixing e.g. welding detail if fixed to steel.

## preparation

WARNING! If you need to remove an old shutter prior to installing a B&D shutter ensure to:

- Roll the curtain up and secure curtain around the middle.
- · Use correct lifting techniques and machinery.

- Fit machinery snugly under shutter before loosening the brackets or locating U bolts.
- Slowly undo bolts to release the spring tension and the shutter from the brackets.
- Slowly lift the shutter from the brackets keeping it balanced as it is lowered to the ground.

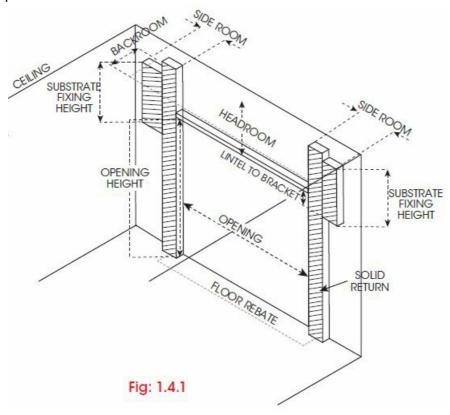
#### before installation

### requirements

**mounting** – The shutter is designed to be mounted behind the opening.

**obstructions** – Ensure that the surface where the shutter will be fitted is flush and smooth, and the area behind the opening is free from any protrusions. structural suitability – Ensure the opening is strong enough to support the shutter. If unsure, consult a builder.

**level and plumb** – The shutter must be installed in an absolutely level position, if opening is not level and square, appearance and/or sideroom requirements will be affected. The floor should be level or recessed across the opening to avoid gaps.



#### measurements

- **opening width** Check the width of the curtain with the width of the opening and ensure that when the fixing holes in the curtain are lined up with the fixing studs on the drum, the curtain overlaps on each side of the opening by 70mm, therefore shutter curtain, including clips should be 140mm wider. (Fig 1.4.1) Position the drum in front of the opening so that the drum tube (excluding the gear wheel) is exactly in the centre of the opening.
- opening height The shutter opening height indicates the distance between the ground and rubber seal at the bottom
   of the shutter, with shutter fully open.
- headroom A minimum headroom is required for all shutters. Refer to Fig 1.4.2- 1.4.5 for measurements. If

the shutter is installed lower into the opening, additional loss of shutter opening height will result.

- **backroom** A minimum backroom is required for all shutters. Refer to Fig Fig 1.4.2- 1.4.5 for measurements. Extra room would be required for installing large shutters.
- **side room** The minimum required sideroom for shutters is dependent on the drive mechanism installed and whether the shutter has windlock guides. The measurement must extend beyond the top of the opening to provide fixing for the support brackets. Refer to Fig Fig 1.4.2- 1.4.5 for measurements.

# parts checklist

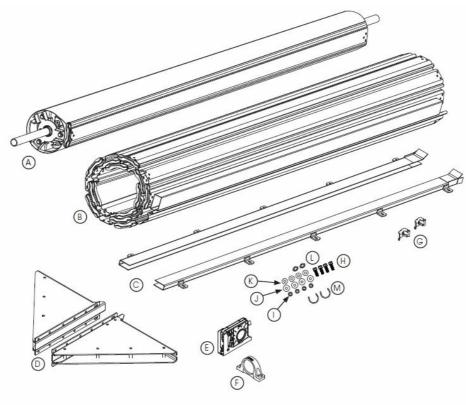
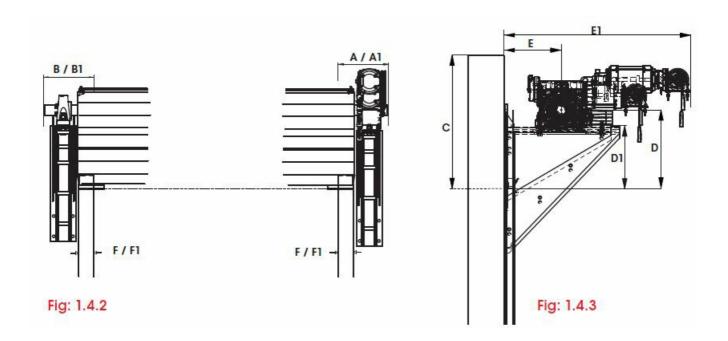


Fig: 1.4.2

	ROLL-A-SHUTTER	RAS
ITEM	DESCRIPTION	QTY
Α	STEEL DRUM	1
В	STEEL CURTAIN WITH CLIPS	1
С	SHUTTER GUIDES LEFT AND RIGHT HANDED	2
D	BRACKETS	2
E	SAFETY BRAKE	1
F	PILLOW BEARING 80MM	1
	SMALL PARTS BAG CONTAINING	212
G	BOTTOM RAIL STOPS AND SCREWS	2
Н	BOLT M22X2.5X90 HEX-HD GRADE 8	4
1	NUT M22X2.5 GRADE 8 ZNPI	4
J	WASHER MUDGUARD M22X44X3.2XAP	4
K	WASHER FLAT M22X44X3.5 ZNPI	4
L	WASHER SPRING M22	2
M	SHAFT COLLARS (DIRECTLIFT)	2

# measurements direct lift / direct drive

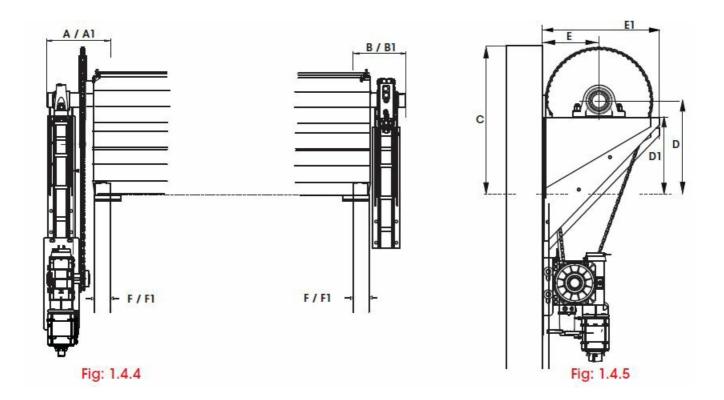
installation requirements Steel Direct Lift / Direct Drive



						dimen	sion to	ıble								
Door	Door height	Door width	Drum	Side	mum room <b>er End</b>	Side	mum room <b>End</b>	Recommended Headroom	Axle to Lintel	Lintel to Bracket		mended room		dth of uide		
Model Code	(mm)	(mm)	Size	W/L	Non W/L	W/L	Non W/L				Axle to Wall	Opener	W/L	Non W/L		
				Α	A1	В	B1	С	D	D1	E	El	F	F1		
	up to 3000	up to 4200						636	418	ē c	248					
RAS	3001 - 3900	up to 6000	8"					650	425	spindle. allation	255					
6/100	3901 - 5100	up to 5700	0					694	447	spi	277					
	5101 - 6000	up to 6000						730	465	e of spindle installation	295					
	up to 3000	up to 4200						636	418	size in ir	248					
RAS	3001 - 3900	up to 6000	8"					650	425		255					
8/100	3901 - 5100	up to 5700	0								694	447 0 0	Measurement determined by Refer to Installing first bracket manual.	277		
	5101 - 6000	up to 6000		295	295	295	295	730	465	ermined first brac manual.	295	1040	90	77		
	up to 3000	up to 4200		_,_				600	400	irst	230	, , , ,				
RAS	3001 - 3900	up to 6000	8"					650	425	ete g f	255					
10/100	3901 - 5100	up to 5700	0					700	450	± <u>≡</u>	280					
	5101 - 6000	up to 6000		-					730	465	stc	295				
	up to 3000	up to 4200	10"				610	405	en c	235						
RAS	3001 - 3900	up to 6000	10					708	454	sur er to	284					
12/100	3901 - 5100	up to 5700	12"	1			760	480	ed	310						
	5101 - 6000	up to 6000	12					790	495	Σc	325					

# measurements direct lift / chain drive

installation requirements Steel Direct Lift / Chain Drive



				di	mensi	on tab	le									
Door height	Door width	Drum	Side	room	Side	room	Recommended Headroom	Axle to Lintel	Lintel to Bracket				th of ide			
(mm)	(mm)	Size	W/L	Non W/L	W/L	Non W/L	Bundle to lintel			Axle to Wall	Bundle	W/L	Non W/L			
			Α	A1	В	B1	С	D	DI	E	E1	F	F1			
up to 3000	up to 9000						636	418	Υ.	248	436					
3001 - 3900	up to 8500						650	425	ea	255	450					
3901 - 5100	up to 8000	8″					694	447	<u>7</u> -	277	494					
5101 - 6500	up to 7500						730	465	ety	295	530					
6501 - 6800	5405-7000						810	505	saf	335	610					
up to 3000	up to 9000						636	418	Du L	248	436					
3001 - 3900	up to 8500						650	425	atio	255	450					
3901 - 5100	up to 8000	8"					694	447	alk	277	494					
5101 - 6500	up to 7500						730	465	nst	295	530					
6501 - 6800	5405-7000									810	505	of b	335	610		
up to 3000			0.50				660	430	ete	260	460		-2500			
3001 - 4200	8	8"	353	33/	331	305	710	455	siz acl	285	510	90	77			
4201 - 5400	up to 12000	0					760	480		310	560					
5401 - 6500	up 10 12000						790	495	irst	325	590					
6501 - 9000		10"					830	515	nin 1 Bu		630					
		10						65 65 65 65	≣ fer							
up to 3000	in .	10"							der							
	a 2	10							or							
									me er t							
	up to 12000	12"							al Sefe							
									dsi							
	2									Me						
	up to 3000 3001 - 3900 3901 - 5100 5101 - 6500 6501 - 6800 up to 3000 3001 - 3900 3901 - 5100 5101 - 6500 4501 - 6800 up to 3000 3001 - 4200 4201 - 5400 5401 - 6500 6501 - 9000 9001 - 10000	(mm) (mm)  up to 3000 up to 9000  3001 - 3900 up to 8500  3901 - 5100 up to 8000  5101 - 6500 up to 7500  6501 - 6800 5405- 7000  up to 3000 up to 8500  3901 - 5100 up to 8500  3901 - 5100 up to 8000  5101 - 6500 up to 7500  6501 - 6800 5405- 7000  up to 3000  3001 - 4200  4201 - 5400  5401 - 6500  up to 3000  3001 - 4200  4201 - 5400  5401 - 6500  6501 - 5400  5401 - 6500  6501 - 5400  5401 - 6500  6501 - 7500  7501 - 9000	(mm) (mm) size  up to 3000 up to 9000 3001 - 3900 up to 8500 3901 - 5100 up to 8000 5101 - 6500 up to 7500 6501 - 6800 5405 - 7000 up to 3000 up to 8500 3901 - 5100 up to 8500 3901 - 5100 up to 8000 5101 - 6500 up to 7500 6501 - 6800 5405 - 7000 up to 3000 3001 - 4200 4201 - 5400 5401 - 6500 0501 - 10000 up to 3000 3001 - 4200 4201 - 5400 5401 - 6500 6501 - 9000 9001 - 100000 up to 3000 3001 - 4200 4201 - 5400 5401 - 6500 6501 - 7500 7501 - 9000	Door height (mm)	Door height (mm)	Door height (mm)	Door height (mm)	Door height (mm)	Door height (mm)         Door width (mm)         Door width (mm)         Size on the lider on the lider on the lider on the lider on the line on the line or li	Door height (mm)   Door width (mm)   Door wid	Door height (mm)   Door width (mm)   Prum (mm)   Size   My/L   Non (mm)   Non (mm)	Door height (mm)   Door width (mm)   Door wid	Door height (mm)   Door width (mm)   Door wid			

# tools and equipment

The following tools are needed to install Roll-A-Shutter® 6, 8, 10 & 12/100 Series.

- personal safety equipment
- comprehensive tool kit
- selected electric tools
- magnetic drill press
- electric welder

- · lifting straps
- · heavy duty rope
- scissor lift
- forklift
- crane
- · chain blocks
- spring tensioning bars

# specifications

Desciption	Туре	Industrial Steel Slat Type Shutter									
Desciption	Name	6/	100	8/1	100	10/	100	12/	100		
Model code	-	R	AS	RA	AS	R	AS	R	AS		
		Min	Max	Min	Max	Min	Max	Min	Max		
Max Door Heig	ht	900	6000	900	6000	900	10000	900	10000		
Max Door Widt	h	900	7000	900	7000	900	12000	900	12000		
SHUTTER		89		© .		620		y			
Slat thickness		0.6mm		0.8	mm	1.0	mm	1.0	mm		
Minimum shutt	er overlap each side	701	mm	70r	mm	70r	mm	70r	mm		
Axle overlap o	n each side	350	mm	350	mm	350	mm	350	mm		
Drum Type	with chain OR opener	168mm		168mm		168	lmm	168	mm		
Operation	Chain geared (below 25sqm)	•		•		•					
0.05%	optional motor			14				included			
	Aluminium T section		•	9	•	•		•			
Bottom Rails	Weatherseal	inclu	uded	inclu	ıded	included		inclu	uded		
	Box section	optional		opti	onal		dard Om(W)		dard Om(W)		
SLAT CONFIGU	RATION			·		54					
Solid			•		•		•	8	•		
Slotted 19 x 10	1mm (13%)										
Slotted 32mm l	Round (14.5%)		•	•			•				
GUIDES						VIII					
Steel Channel, depth 77mm	Galvanised 2.0mm steel,		•				•		•		
LOCKS		18		4		(5)	7				
External Botton	n rail	Shoo	ot Bolt	Shoo	t Bolt	Shoo	ot Bolt	Shoo	ot Bolt		
Internal & Exter	rnal slide bolts		•		•	20					
Optional Extras	5	**									
Door Opener		Axes	ss Pro	Axes	s Pro		ss Pro GFA		ss Pro GFA		
Fixed or indepe	endent tapers	10mm	160mm	10mm	160mm	10mm	160mm	10mm	160mi		
High Wind Opt	ion			•		•		**			
Mullions		13	•	•							

# mounting weights

Due to the considerable variation in door weights, weights shown are intended to be used for guidance only and not taken as exact figures. Intermediate sizes can be approximated from the sizes listed.

**WARNING!** Weight information supplied is for installer to utilize correct lifting equipment. Failure to used correct equipment may result in death or damage to property.

# all weight shown in kilograms

# 6/100

8		width										
height	2500		3000		4000		50	00	70	00	90	00
	CW	DW	CW	DW	CW	DW	CW	DW	CW	DW	CW	DW
2500	78	70.5	89.9	119	119.7	187	149.6	240.1	209.3	336	268.9	442
3000	85.6	107.5	120	94.2	137.1	187	171.2	240.1	239.6	336	307.9	442
4000	107.3	107.5	140	94.2	171.7	187	214.5	210	300.2	336		
5000	128.9	107.5	154.8	119	272.0	148.1	340	208.6	475.8	260.7		
6000	150.6	107.5	180.8	119	317.8	148.1	397.2	208.6	555.9	260.7		
6800						•			620	240.7		

# 8/100

		width											
height	2500		3000		4000		50	00	70	00	90	00	
	CW	DW	CW	DW	CW	DW	CW	DW	CW	DW	CW	DW	
2500	113.1	86.7	167.9	72.6	181	138.8	226.2	173.4	329.4	264.7	423.4	354.5	
3000	129.5	86.7	183.1	93.3	207.3	138.8	259	173.4	377.4	264.7	485.1	354.5	
4000	162.4	86.7	213.9	129	259.9	138.8	324.8	173.4	473.2	264.7		30 33	
5000	195.3	86.7	257.2	129	312.5	138.8	390.6	173.4	569.1	234.7			
6000	228.2	86.7	300.5	129	365.1	138.8	456.3	173.4	664.9	234.7			
6800			,			•			741.6	234.7			

# 10/100

		width											
height	ht 2500		30	3000 4500		00	70	00	85	00	10000		
	CW	DW	CW	DW	CW	DW	CW	DW	CW	DW	CW	DW	
2500	139.8	70.3	167.9	76.2	251.4	128.2	463.1	183.2	562.1	227.6	661.4	261.5	
3000	152.5	73.1	183.1	96.9	255.6	198.5	470.7	301.2	571.3	362.5	672.2	348.8	
4000	166.6	154.2	213.9	119	320.5	198.5	590.4	301.2	716.7	362.5	843.3	348.8	
5000	200.4	154.2	257.2	119	402.4	153	685	215.4	831.6	247.3	978.5	319.2	
6000	234.1	154.2	300.5	119	470.2	153	800.5	215.4	979.1	247.3	1150	319.2	
6800							892.9	215.4	1084	247.3	1275	319.2	

# 12/100

	width											
height	2500		2500 4000		60	6000		00	100	00	12000	
	CW	DW	CW	DW	CW	DW	CW	DW	CW	DW	CW	DW
2500	148.6	132.5	237.9	212	356.6	318	475.3	424	594.1	530	712.8	636
4000	213.6	132.5	341.8	212	512.5	318	683.2	424	853.9	530	1024	636
6000	300.2	132.5	480.3	212	720.3	318	960.3	424	1200	530	1440	636
8000	386.8	132.5	618.9	212	928.2	318	1237.4	424	1546.7	530	1856	636
10000	473.4	132.5	757.5	212	1136	318	1514.5	424	1892.1	530		

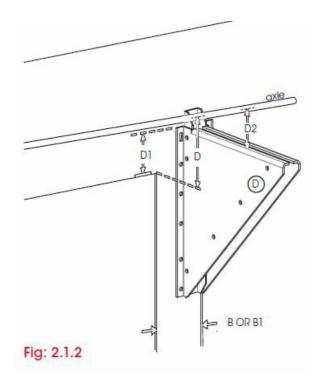
CW	CURTAIN WEIGHT
DW	DRUM WEIGHT

# installation

# install first bracket

		plai	n end		D1	
	B&D Model	В	B1	D		D2
	Model	W/L	non W/L			
	RS0654			4		42
Direct	RS0655	295	295	4. tre	NO	49
Drive	RS0656		295	S L	be	49
	RS0657			L.3	ā	60
	RS0650			to 1.4.3 & 1.4.4 measurement	m	95
Chain	RS0651	001	205	T to	for	118
Drive	RS0652	331	305	Refer to 1.4.3 for measure	See formula below	118
	RS0653			R.	S	145
bra	cket heig	ht po	sition (	D1 = D	- D2	)

- Look at the safety brakes E supplied with the shutter and match the B&D model number to the above diagrams Fig 2.1.1 and 2.1.2 for bracket height and sideroom position for the plain end bracket.
- Mark 6 hole positions using slots of the bracket D .
- Drill holes, then attach bracket using suitable fasteners as per 1.2 substrate fastener recommendations.



**WARNING!** The installer must select and use fasteners appropriate to the material into which they are being fixed.



install second bracket

	dimensior	table			
		oper	er end		
	B&D Model	Α	A1		D2
	Wodel	W/L	non W/L	ion	
	RS0654			osit oeld	120
Direct	RS0655	295	295	a k	120
Drive	RS0656	290	295	ket	120
	RS0657			ac	135
	RS0650			for bracket position see formula below	115
Chain	RS0651	252	227	fo	180
Drive	RS0652	353	337		190
	RS0653				190
brac	cket posit	ion =	Axle le	vel - [	02

**CAUTION:** The axle must be perfectly level for the shutter to operate.

- Using a laser level or water level, mark the position on the wall for the centre of the axle (Fig 2.2.1).
- Re-check levels, determine opener end bracket position as per calculation above, then drill and affix with fasteners as with first bracket.

# position the drum assembly on brackets

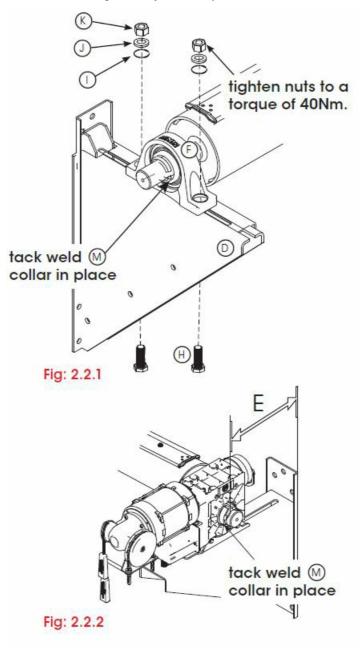
# direct drive position

**TWO PERSON:** this product requires two persons to secure onto the brackets. Use proper techniques and equipment to raise the drum up and onto the brackets. Refer to weights table in section 1.7 for equipment lifting capacity.

dimension table						
		height (mm)	width (mm)	E		
Direct Drive	RAS 10/100	up to 3000	up to 4200	230		
		3001 - 3900	up to 6000	255		
		3901 - 5100	up to 5700	280		
		5101 - 6000	up to 6000	295		
	RAS 12/100	up to 3000	up to 4200	235		
		3001 - 3900	up to 6000	284		
		3901 - 5100	up to 5700	310		
		5101 - 6000	up to 6000	325		

• With the drum the correct way around (curtain rolls down rear of the opening) remove the slat mounted to the drum, keeping the slat, nuts and bolts to the side.

- Carefully lift the drum up and over the brackets D using suitable lifting equipment to avoid damaging the drum.
- Before lowering onto the brackets slide the bearing F and drive unit onto the ends, make sure they are correctly orientated.
- Position onto the brackets as per fig 2.2.1 and 2.2.2 using measurement E from the dimension table, slide the axle through and fit shaft collars M . When satisfied the shaft collars can be tack welded in place.
- Secure bearing and drive unit in place with Hex Head Bolts H, spring washers L, flat washers K and M22 nuts I as shown. Tighten the nuts on the bearings evenly to a torque of 40Nm or 30 ft.lb.



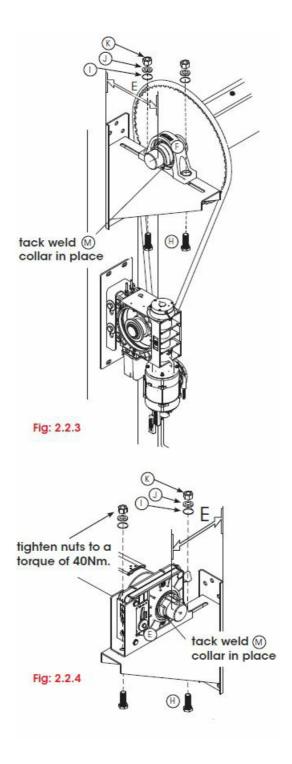
# chain drive position

**TWO PERSON:** this product requires two persons to secure onto the brackets. Use proper techniques and equipment to raise the drum up and onto the brackets. Refer to weights table in section 1.7 for equipment lifting capacity.

dimension table						
		height (mm)	width (mm)	E		
Chain Drive	RAS 10/100	up to 3000	up to 12000	260		
		3001 - 4200		285		
		4201 - 5400		310		
		5401 - 6500		325		
		6501 - 9000		345		
		9001 - 10000		365		
	RAS 12/100	up to 3000	up to 12000	265		
		3001 - 4200		314		
		4201 - 5400		340		
		5401 - 6500		355		
		6501 - 7500		360		
		7501 - 9000		380		
		9001 - 10000		385		

- a) With the drum the correct way around (curtain rolls down rear of the opening) remove the slat mounted to the drum, keeping the slat, nuts and bolts to the side.
- b) Carefully lift the drum up and over the brackets using suitable lifting equipment to avoid damaging the drum.
- c) Before lowering onto the brackets slide the small chain sprocket, bearings F and safety brake E onto the ends, make sure they are correctly orientated.
- d) Fit the opener plate and opener as shown in Fig 2.2.3 using suitable fasteners as per 1.2 substrate fastener recommendations.
- e) Position the drum onto the brackets as per fig 2.2.3 and 2.2.4 using measurement E from the dimension table, when satisfied the shaft collars M can be tack welded in place.
- f) Secure bearing and safety brake in place with Hex Head Bolts H, spring washers L, flat washers K and M22 nuts I as shown. Tighten the nuts on the bearings evenly to a torque of 40Nm or 30 ft.lb.
- g) Fit the manual chain to the chain wheel. Align the sprockets of the opener and small chain sprocket and tighten.
- h) Tension the drive chain and ensure the sprocket grub screws are tightened.
- i) The safety brake must be connected to the opener via a 2core wire (not supplied) to ensure the safety brake operation is active.

WARNING! The 2core wire MUST be secured away from any moving parts.



## preparing and fitting the curtain

- a) The curtain can now be prepared; make sure it is off the ground so that lifting slings or fork lift tines can be fitted under it.
- b) Make sure that it is the correct way around with the curtain rolling away from the forklift and the top end slat of the curtain is on the top of the roll.
- c) Remove the packaging and strapping around the curtain.
- d) Using a screwdriver twist the end clip on the top slat so that the slat previously removed can be slid into the top slat. When fully inserted twist the end clip back into position.
- e) The bundle of curtain now needs to be secured in a roll as it was in the original packaging, this should be done about a metre from each end using the appropriate ropes wound around 2-3 times.

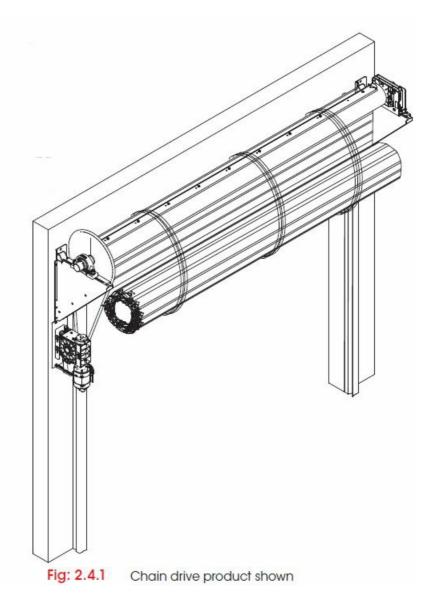
**NOTE:** For shutters wider than 5 metres an additional centre rope should be used.

**WARNING!** The lifting slings MUST be able to lift the full curtain weight. Refer to curtain weight table in section 1.7.

## fitting the curtain to the drum

**WARNING!** This step requires proper techniques and equipment to raise the curtain up to the drum. Refer to weights table in section 1.7 for equipment lifting capacity. Failure to have appropriate equipment and an exclusion zone can cause death or damage to property.

- Lift the curtain into position using a overhead crane or forklift. Ensure adequate protection is placed around the curtain to avoid damage. **NOTE:** If using the crane method and a spreader bar is not available ensure the straps are placed as wide apart as possible.
- Carefully lift to within 300mm under the drum, Figure 2.4.1, by means of two other lengths of heavy gauge rope sling the curtain roll up to the drum as shown in the illustration. Make sure the end of the curtain is on top of the roll and able to be raised up.
- When you are sure the curtain is held securely by several wraps of heavy rope release the lifting straps or forklift slowly allowing the wraps of rope to take the weight of the curtain.
- Switch power on to the opener and operate opener to rotate the drum and unroll the curtain sufficiently to allow the fixing slat to be passed up between the lintel and the drum. Rotate the drum and curtain until the fixing studs on the drum and the curtain fixing slat can be aligned. Secure the hauling chain (if installed) and fix the curtain to the drum with the studs nuts and washers provided.
- Release the hauling chain, operate opener to rotate the drum to roll the curtain fully onto the drum, make sure
  the bottom rail is at about 5 o'clock. Secure the hauling chain to prevent the drum from turning and tighten the
  rope slings.
- The assembly is now ready for the guides to be installed.



# install the guides

### positioning the guides

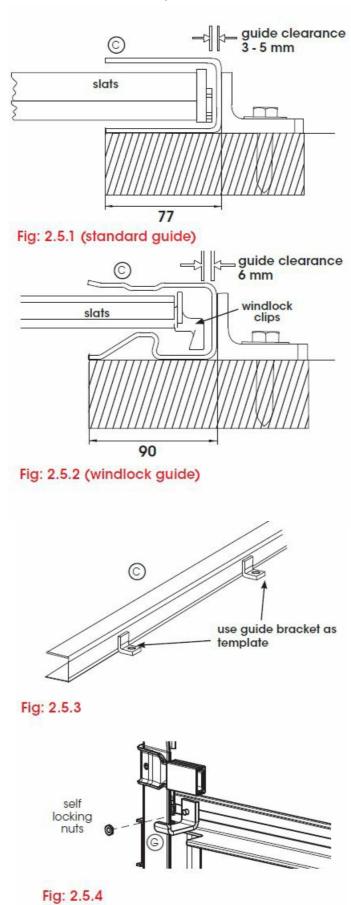
Guides must be correct length. The guide stop should be level with the bottom of the lintel for aluminum bottom rail installation. Guides can be shortened by cutting the bottom of guide.

- a) Position guides C true and plumb at each side of the opening. Allow 3-5 mm of working clearance between the shutter and the inside of each guide as per Fig 2.5.1. For Windlock setup refer to Fig 2.5.2.
- b) Using the guides brackets as a template (Fig 2.5.3) mark out and drill holes in the wall to match the spacing of the fixing bolt holes in the guides bracket.
- c) Mark, drill holes and loosely fix the first guide. Select the appropriate fixing as per Section 1.2.
- d) Using a laser level, transfer position of top of first guide arm to opposite side of opening, then mark, drill and fix second guide. Ensure that the guides are secure.
- e) Apply general purpose grease to the internal surface of the guide to safeguard smooth operation.
- CAUTION: The guides must be perfectly level for correct shutter operation.
- WARNING! All High Wind installations must adhere to fixing types and centres as referenced in the B&D High Wind Drawings.

### tip

If securing to uneven blockwork, packers may be required behind clips, to prevent them twisting out of square;

also ensure that clips are positioned on secure blocks, not mortar.



# install the bottom rail stop

• Carefully remove the rope slings holding the curtain, disengage opener and lower bottom rail into the guides.

**WARNING!** When the bands holding the shutter curtain rolled up are removed, there will be a strong tendency to rise and revolve. If uncontrolled, the rapidly unrolling shutter could cause damage or injury.

• Fit bottom rail stops G using self locking nuts provided. Allow the door to rise and rest against the head stop (Fig 2.5.4)

### after installation care

general care of your Roll-A-Shutter®

### cleaning

Your B&D Roll-A-Shutter® has been manufactured from galvanised or powder coated steel, which is one of the best paint films commercially available today. However, all exposed surfaces require some attention to guard against the premature onset of corrosion and any other harmful atmospheric effects. In our atmosphere there are harmful deposits that gather on the door surface and if not removed regularly, will seriously affect the appearance and life of the door.

**Note:** Be aware of electric shock. Washing of the door with clean water and a cloth is recommended – particular care should be taken to clean areas of the door not normally washed by rain.

### regular maintenance required

B&D recommends that you check the operation of your Roll-A-Shutter® at least every six months (more regularly in extreme environments or frequent use). The effort required to manually open and to manually close the door should be about the same (if door has an automatic opener, put into manual mode before testing door).

**Note:** The door guide grease should be cleaned out and replaced least annually or more frequently in extreme conditions. If the door is difficult to operate in either direction (up or down) then check that the inside surfaces of the guides are clean and free of obstructions. If the door is still difficult to operate, then your door will need a service to adjust the spring tension and possibly other operational parts of the door. This service should only be carried out by an experienced door technician, using the correct tools. If you have an automatic opener fitted to your door, it is particularly important that you ensure the optimum operation of the door, otherwise you may reduce the effective life of the opener. vTo keep your door running well, it is recommended that your door be serviced, by an experienced door technician, every 12 months (more regularly in extreme environments or frequent use), or earlier if required.

# spring tension

It is natural for springs to lose tension over time. When spring tension is adjusted or when your door is first installed it is usual to apply a little more tension than is required for balanced operation, to allow for the normal "settling in" of the springs.

**WARNING:** The springs on the door are under extreme tension. On NO account should they be adjusted by an inexperienced person. B&D recommends regular servicing and safety checks be carried out at least annually, more frequently in extreme conditions or in high use environments.

# warranty

B&D Roll-A-Shutter® is covered by a 12 month warranty for complete door and parts, surface (excludes salt corrosion). Warranty conditional on proper care as recommended above. Full details of the warranty are available from **bnd.com.au** 

### **b&d doors office locations**

- Head Office 6-8 Fiveways Blvd, Keysborough 3073 Phone (03) 9791 2000
- New South Wales 34 Marigold St, Revesby 2212 Phone (02) 9722 5555

- Queensland 17 Oasis Court, Clontarf 4019 Phone (07) 3883 0200
- Victoria 147-153 Canterbury Rd, Kilsyth 3137 Phone (03) 9237 7766
- South Australia 23 Frederick Rd, Royal Park 5014 Phone (08) 8440 4747
- Western Australia 96 Mulgul Rd, Malaga 6090 Phone (08) 9247 8777
- International/Export 34 Marigold St, Revesby 2212 Phone +61 (0)2 9722 5555

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• www.bnd.com.au

## **Documents / Resources**



b d 8 Series Roll A Shutter Direct Lift [pdf] Instruction Manual
10 12-100 Series, 8 Series Roll A Shutter Direct Lift, 8 Series, Roll A Shutter Direct Lift, A Shutter Direct Lift, Shutter Direct Lift, Lift

### References

- B&D Garage Doors Safe and Secure Australian Garage Doors B&D Australia

Manuals+,