



b&d

Flex-A-Door[®]

Sliding Overhead Garage Door

installation instructions **PART NO: 51524**



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

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1.0 before you start

1.1 installation safety warnings

This B&D Flex-A-Door® 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

Tension Springs

- Place a 2 metre exclusion zone around area under the garage opening while installing door. If sufficient area is not available DO NOT install door.
- Follow the installation instructions.
- Ensure correctly fitting winding bar is used.
- Ensure the correct length winding bar is utilised.
- Ensure winding bar is placed appropriately in the torsion socket plug.
- Ensure correct bolts are tightened or loosened (or clamp pliers) to ensure there is no release or controlled release of energy from the spring either through the torsion bar or the winding bar.
- Keep hands clear of the torsion plug at all times.
- Keep head clear of the tensioning bar 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.
- Ensure you check the substrate for electrical wiring prior to penetration.
- 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 panel doors, as the unrolled cut out edges presents a very sharp edge.



CAUTION:

Muscular strain

Fall from ladder

Hand Tools

Entanglement

- Practice correct lifting techniques when required.
- Use mechanical aids such as lifting devices, forklift and cranes where possible.
- Avoid twisting.
- Ensure ladder is the correct type for job.
- Ensure ladder is on flat firm ground that will take the weight without the legs sinking.
- Ensure user has 3 points of contact while on ladder.
- 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.
- Keep hands and loose clothing clear of moving door and guides at all times.
- Depending on the size of the door, this product may requires a two person lift. Use proper techniques and equipment to lift the door from the trailer and into position.



TWO PERSON LIFT:

1.2 fastener recommendations for fitting garage doors



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

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.
- Use the washers supplied in the parts bag to all fixings.

material	fastener type(s)	diameter or type	length of fastener (see note)	BKT	GUIDE
New Solid Brick	Coach Bolts (Hex Lag Screw) and washers - combined with wall plugs	5/16" x	1½"		•
		3/8" x	2"	•	•
	Macplugs (wall plugs) to suit above	5/16" x	50mm		•
		3/8" x	60mm	•	•
	HLC Sleeve Anchors (Dyna Bolts) with washers	12mm x	55mm	•	
New Hollow Brick	HRD-VGK or HGK-VGS (Hex Head) Frame Anchors with washers	10mm x	60mm	•	•
New Solid Concrete	Coach Bolts (Hex Lag Screw) and washers - combined with wall plugs	5/16" x	1½"		•
		3/8" x	2"	•	•
	Macplugs (wall plugs) to suit above	5/16" x	50mm		•
		3/8" x	60mm	•	•
	HLC Sleeve Anchors (Dyna Bolts) with washers	12mm x	55mm	•	
Steel Framing e.g. BHP Framing (with rear access)	Hex Head Bolt Zinc Plated, Hexagon Nuts Zinc Plated, Washers Zinc Plated	5/16" x	1"		•
		3/8" x	1"	•	•
		10mm x	25mm	•	•
		12mm x	25mm	•	
Heavy Gauge Steel	Hex Head Tek and washers	14-20 x	22mm	•	•
Light Steel Framing e.g. BHP House Framing (no rear access)	Heavy Duty Kap Toggle	10mm x	100mm	•	•
		12mm x	100mm	•	
	Hex Head Tek and washers	6-10 x	20mm		•
New Timber	Coach Bolts (Hex Lag Screw) and washers	5/16" x	1½"		•
		3/8" x	2"	•	•
	Hex Head Tek and washers	14-10 x	50mm	•	•

1.3 Flex-A-Door®

Your new B&D Flex-A-Door® has been designed to provide security, attractive appearance and smooth, low effort operation. Your door will not provide optimum performance unless it is installed correctly.

NOTE: Warranties are void if the door is not installed as instructed. For satisfactory door operation please follow the instructions carefully.

WARNING: Incorrect installation may cause serious injury.

1.4 requirements before installation

opening requirements

LEVEL AND PLUMB: The door must be installed in an absolutely level condition. If opening is not level and square, appearance and/or sideroom requirements will be affected. Where jambs are out of plumb, extra sideroom or opening modifications may be required to allow the door guides to stand back from the opening edge. The floor should be level or recessed across the opening to avoid gaps.

OBSTRUCTIONS: Ensure that the surface where the door 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 door, if unsure consult builder or professional door installer.

HEADROOM: Headroom is the amount of height, measured from the ceiling or lowest ceiling obstruction, that the door requires for operation. If headroom clearance is 160mm or more, can use standard door with no impact on opening height. If headroom clearance is 210mm or more, can use standard door with an opener with no impact on opening height. If aesthetics are not important (you don't mind the top 200mm of curtain curving inwards), Flex-A-Door® requires 40mm headroom or 130mm headroom if an opener is to be installed.

SIDEROOM: 100mm standard using guide clips

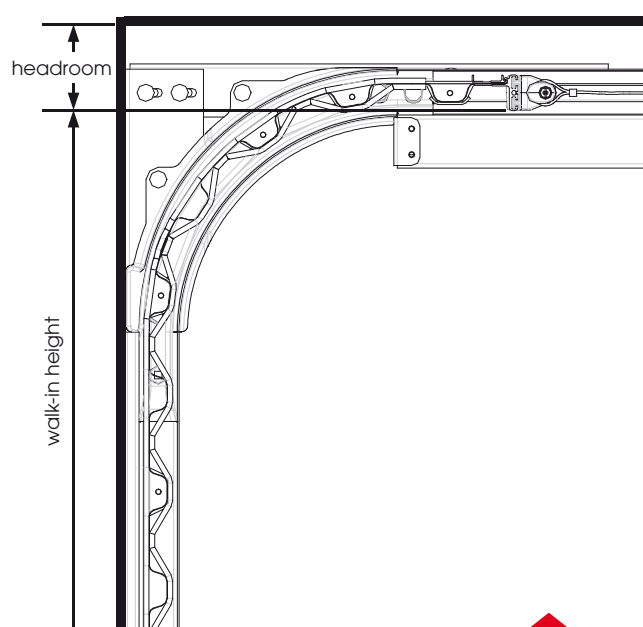
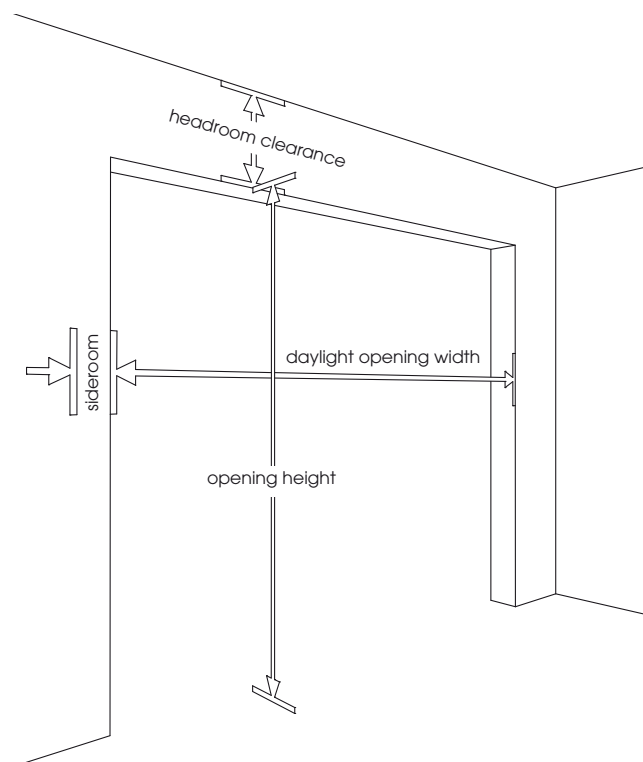
DEPTH: Installations can protrude up to 4 metres into the garage from the door jamb, if there are structural members such as beams across then all headroom related measurements proceed from this point.

RETRACTABLE HEAD INFILL PANEL: This option allows maximisation of walk-in height in situations with no lintel or a very small one.

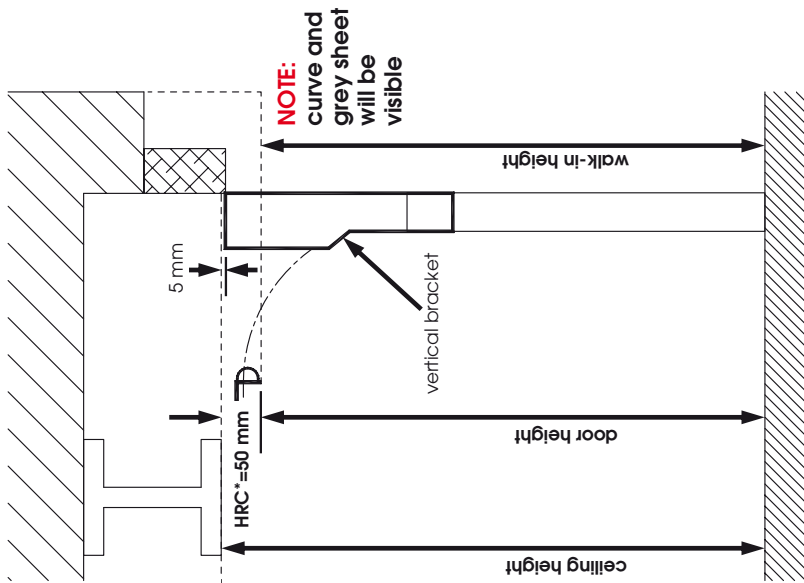
A manual door requires 80mm headroom.

A door with operator requires 130mm headroom.

NOTE: Walk-in height is determined by measuring from the floor to the lowest obstruction from the ceiling, such as beams and so forth.



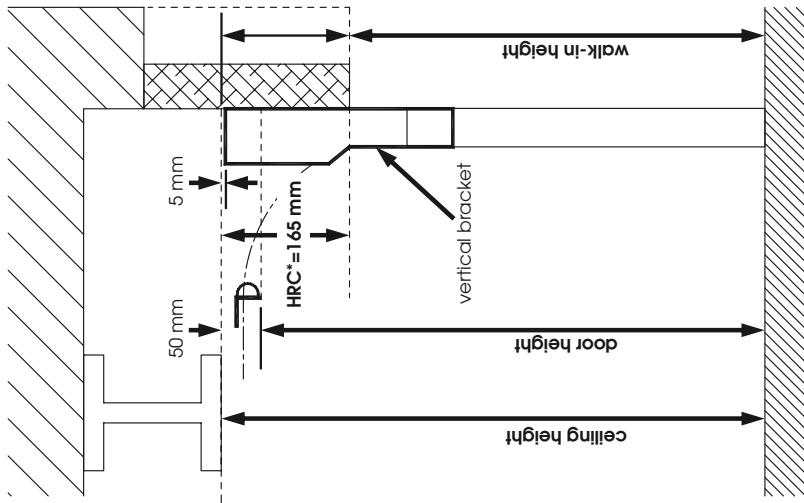
garage depth requirements - manually operated Flex-A-Door®



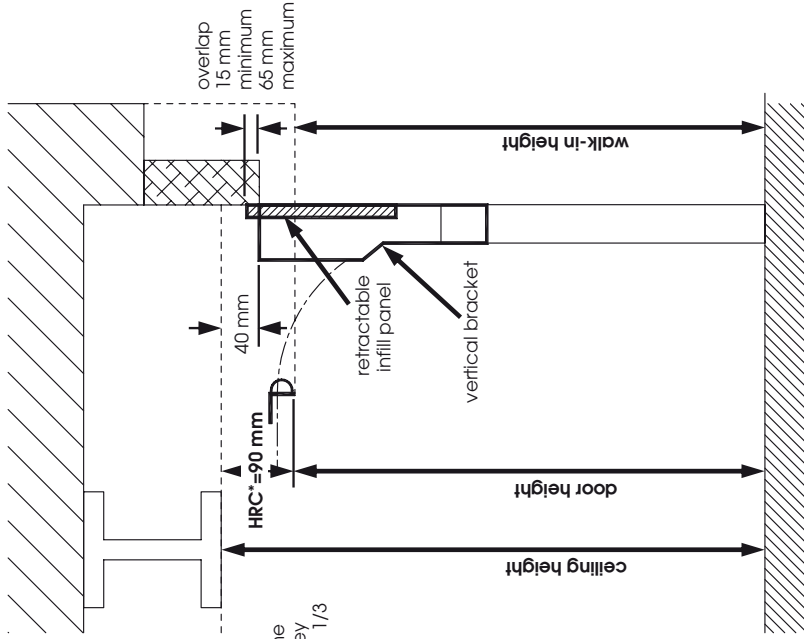
maximum headroom clearance

not recommended

HRC = headroom clearance



standard headroom clearance

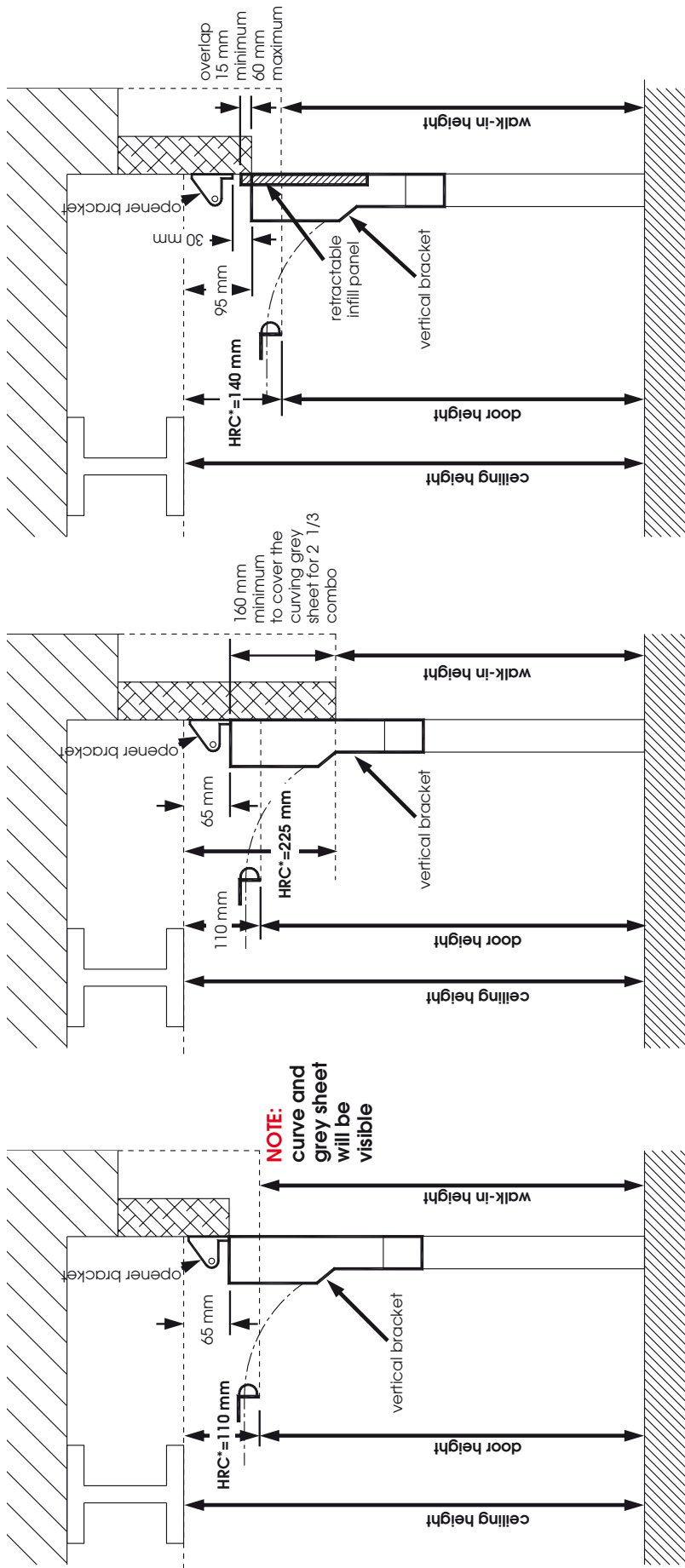


retractable infill panel option

door height	number of curtain sheets	minimum garage depth needed
up to 2130mm	2 1/3	2950mm
up to 2790mm	3	3610mm



garage depth requirements - automated Flex-A-Door® T-Rail



retractable infill panel option

standard headroom clearance

maximum headroom clearance

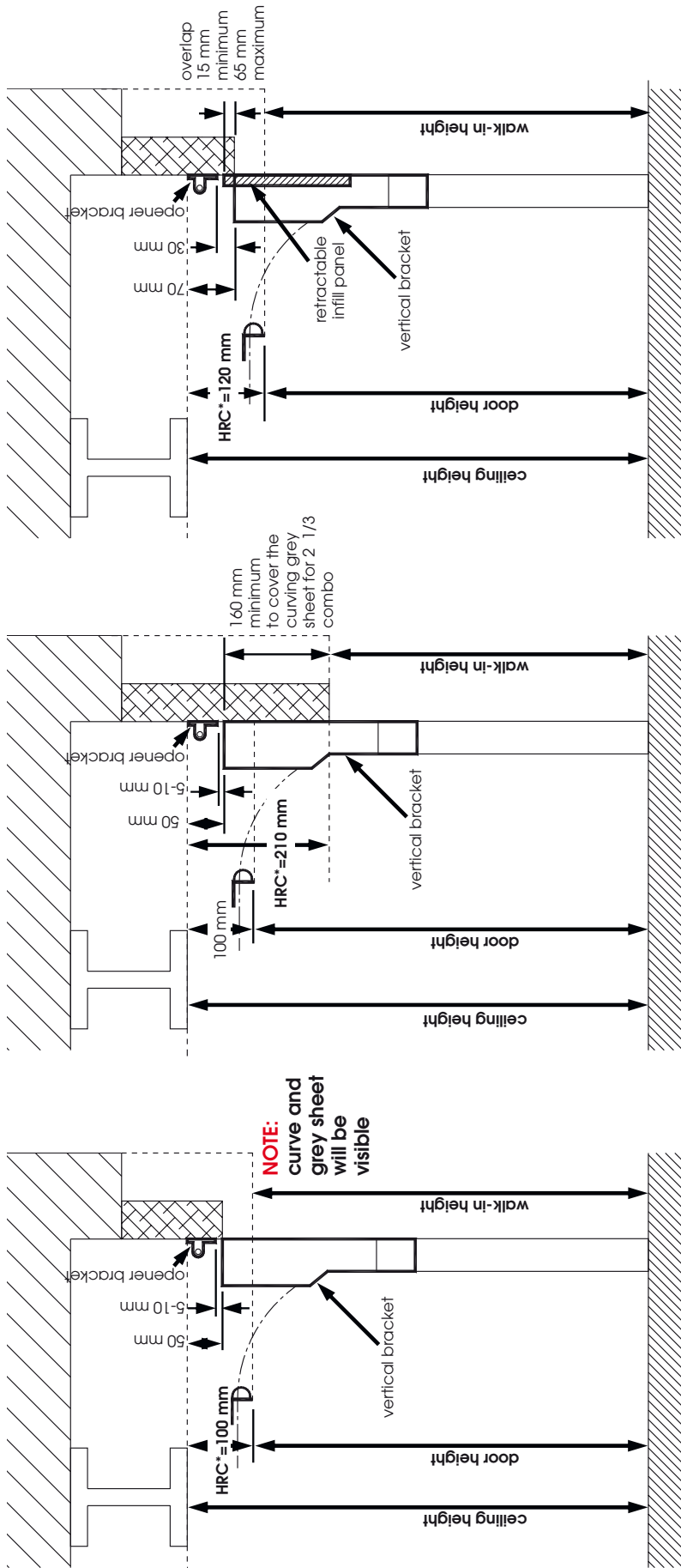
not recommended

HRC = headroom clearance

door height	number of curtain sheets	minimum garage depth needed
up to 2130mm	2 1/3	2950mm
up to 2790mm	3	3610mm



garage depth requirements - automated Flex-A-Door® C-Rail



retractable infill panel option

standard headroom clearance

maximum headroom clearance
not recommended

HRC = headroom clearance

door height	number of curtain sheets	minimum garage depth needed
up to 2130mm	2 1/3	2950mm
up to 2790mm	3	3610mm



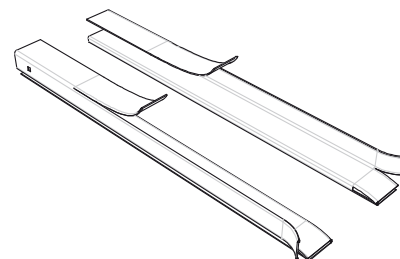
1.5 fixing requirements

The installer must select and use fasteners appropriate to the material into which they are being fixed. It is the installer's responsibility to ensure that the fixing methods are sound.

1.6 tools

A professional installers tool kit is required to install the door.

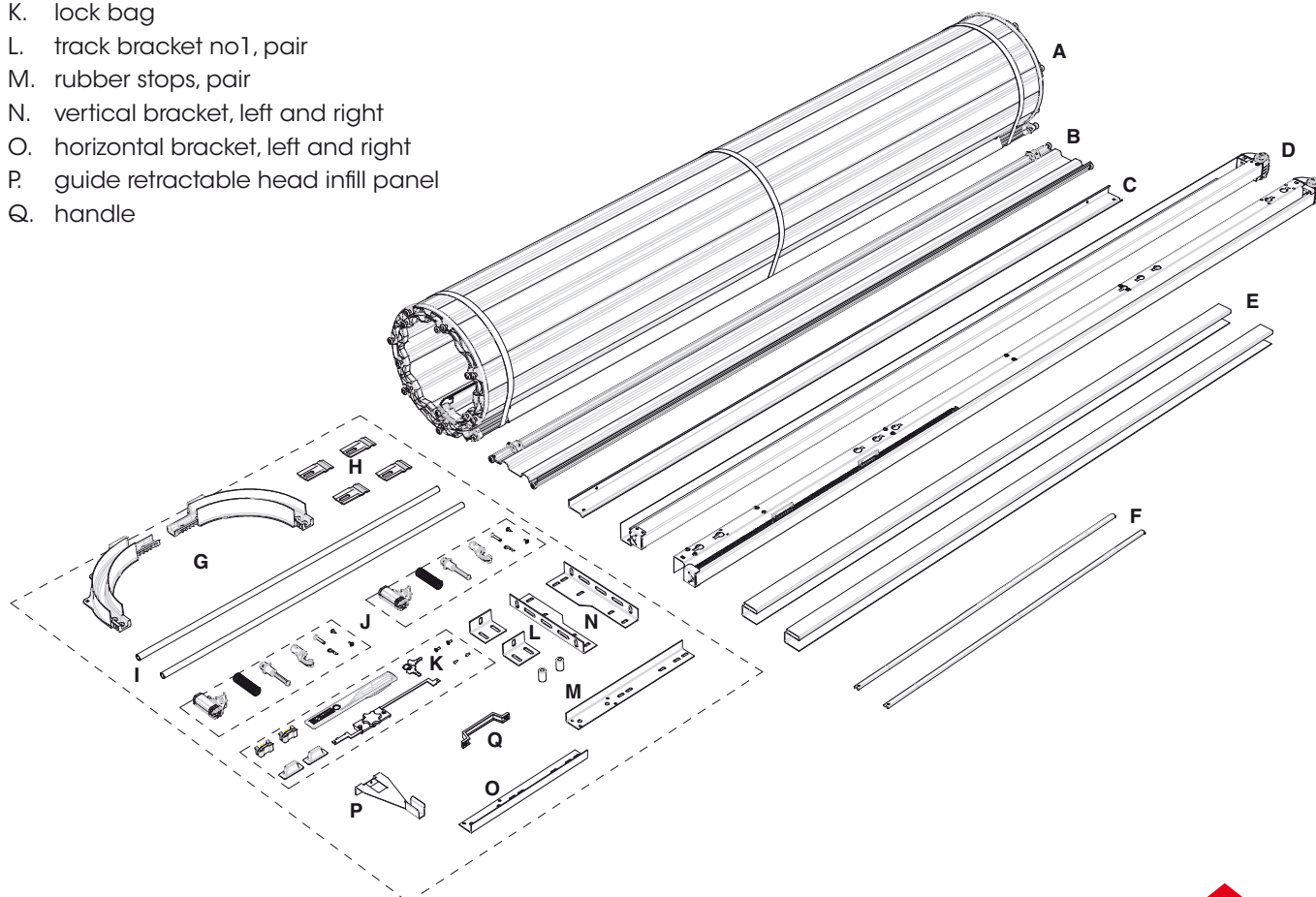
2 curtain guides shown right are not included (available to order from B&D)



1.7 parts checklist

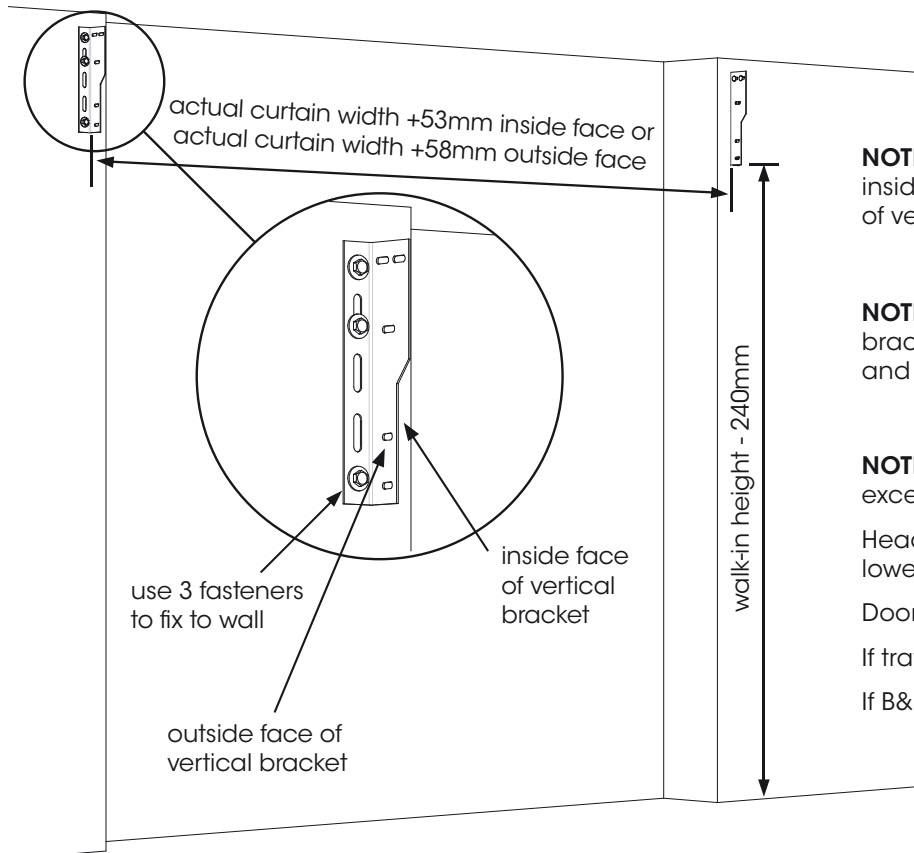
The door will come in two boxes, please unpack and check that all parts have been included before proceeding.

- A. rolled up curtain
- B. retractable head infill panel (optional)
- C. rear brace
- D. horizontal track left and right
- E. vertical tracks, pair
- F. locking bars, pair
- G. plastic curves left and right
- H. guide clips, 4-6
- I. 16mm tube 1m long, pair (optional)
- J. kit arm assembly retractable head infill panel
- K. lock bag
- L. track bracket no1, pair
- M. rubber stops, pair
- N. vertical bracket, left and right
- O. horizontal bracket, left and right
- P. guide retractable head infill panel
- Q. handle



2.0 installation

2.1 vertical & horizontal brackets



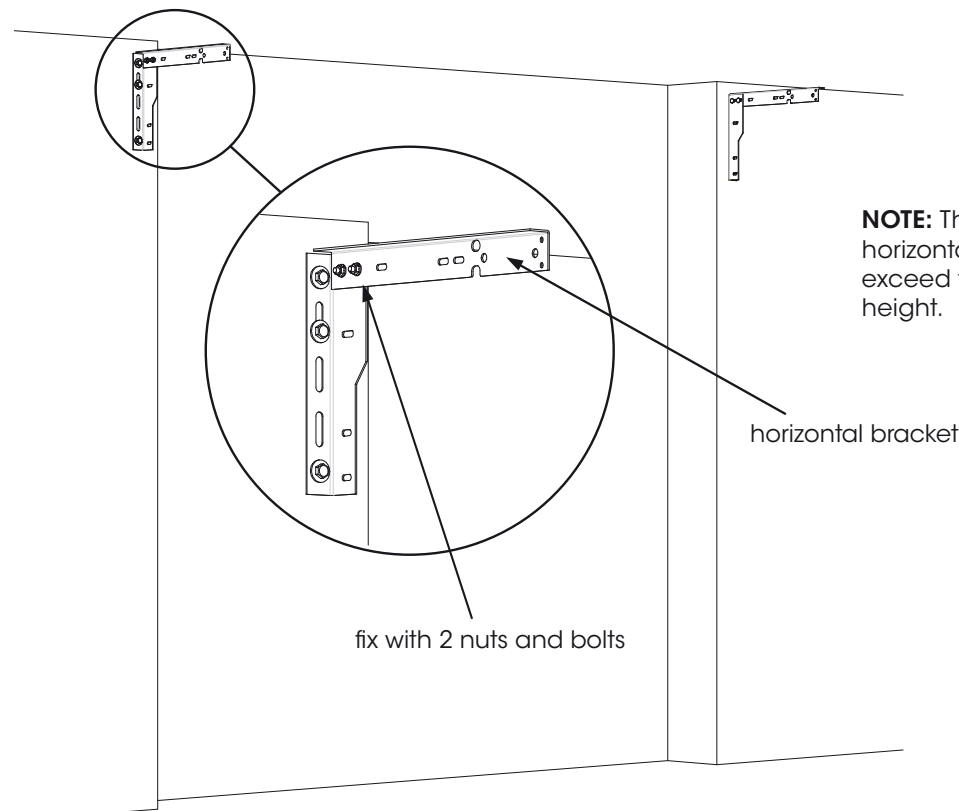
NOTE: Option of using inside or outside face of vertical bracket.

NOTE: Ensure that brackets are level and vertical.

NOTE: The walk in height cannot exceed the marked door height.

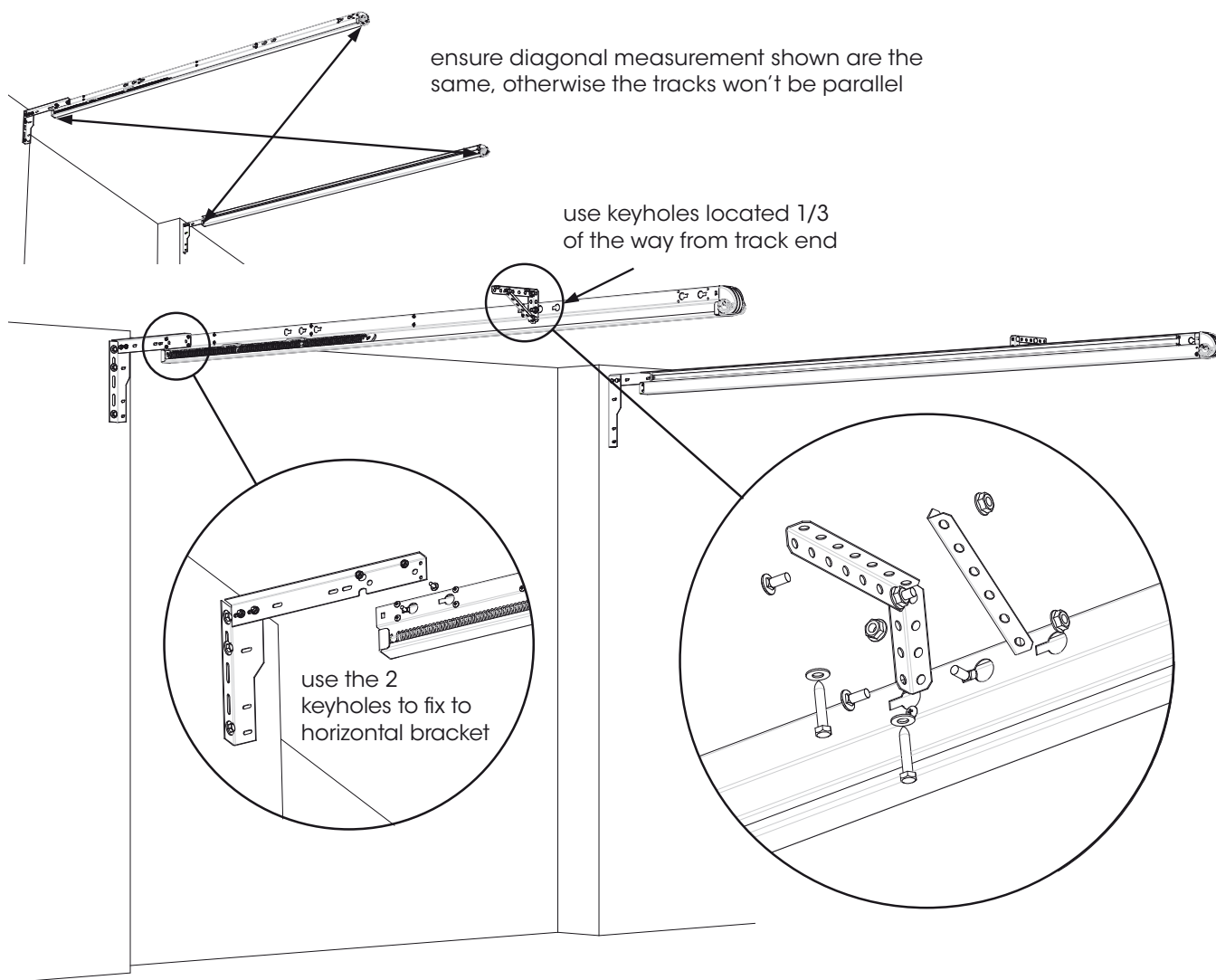
Headroom - top of bracket to the lowest ceiling point.

Door only	+ 05mm
If traveling head fitted	+ 40mm
If B&D opener fitted	+ 50mm

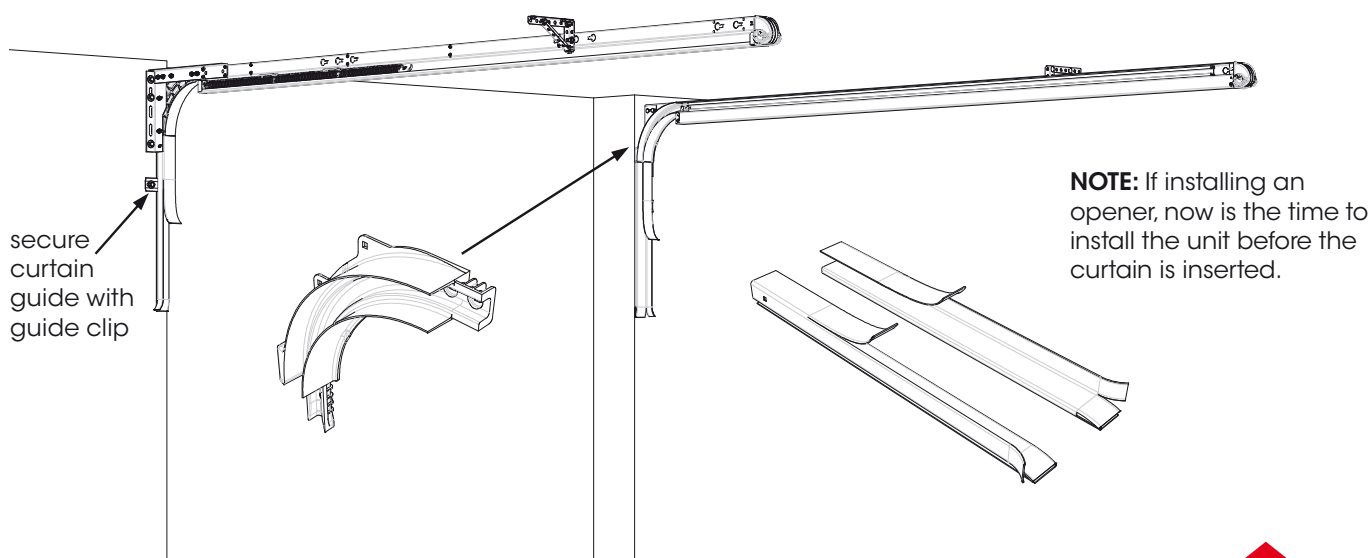


NOTE: The bottom of the horizontal bracket cannot exceed the marked door height.

2.2 horizontal track assembly

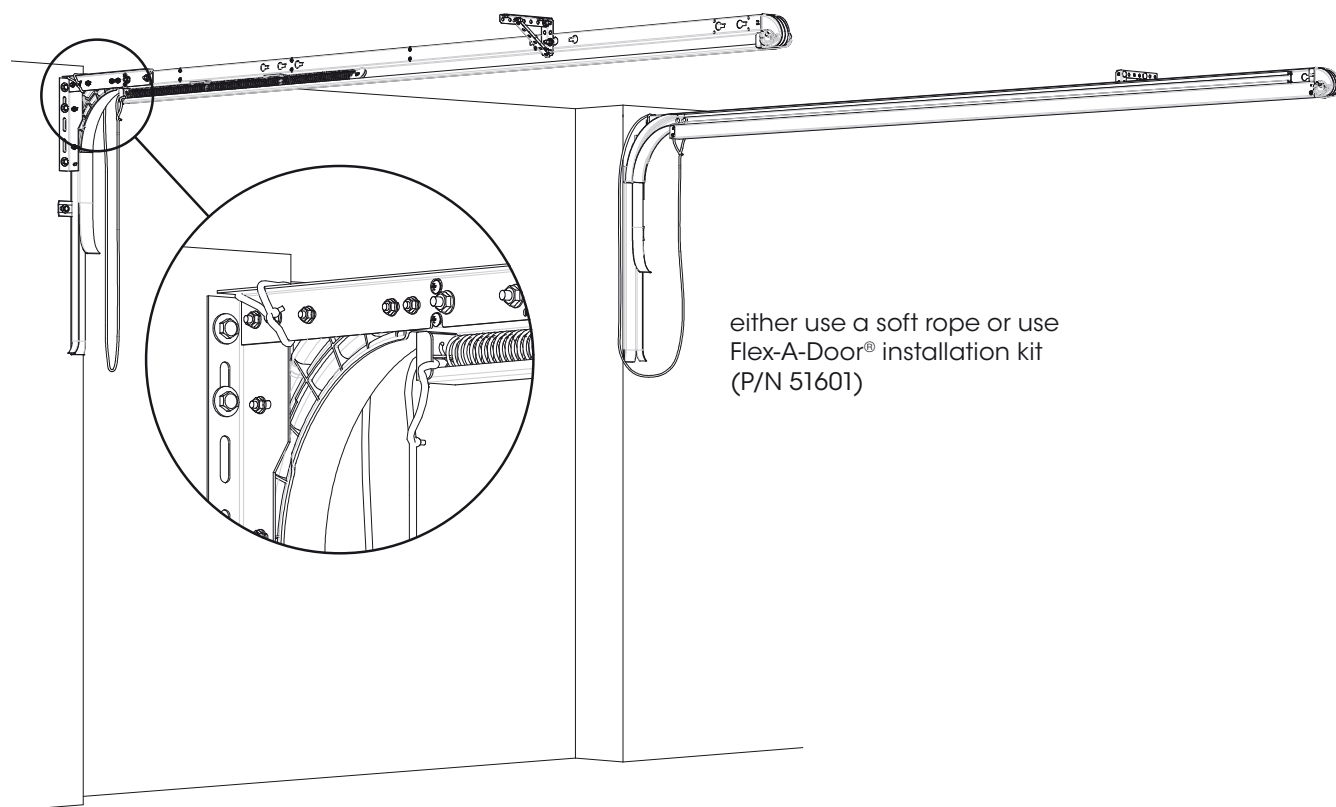


2.3 insert plastic curve & curtain guide tool

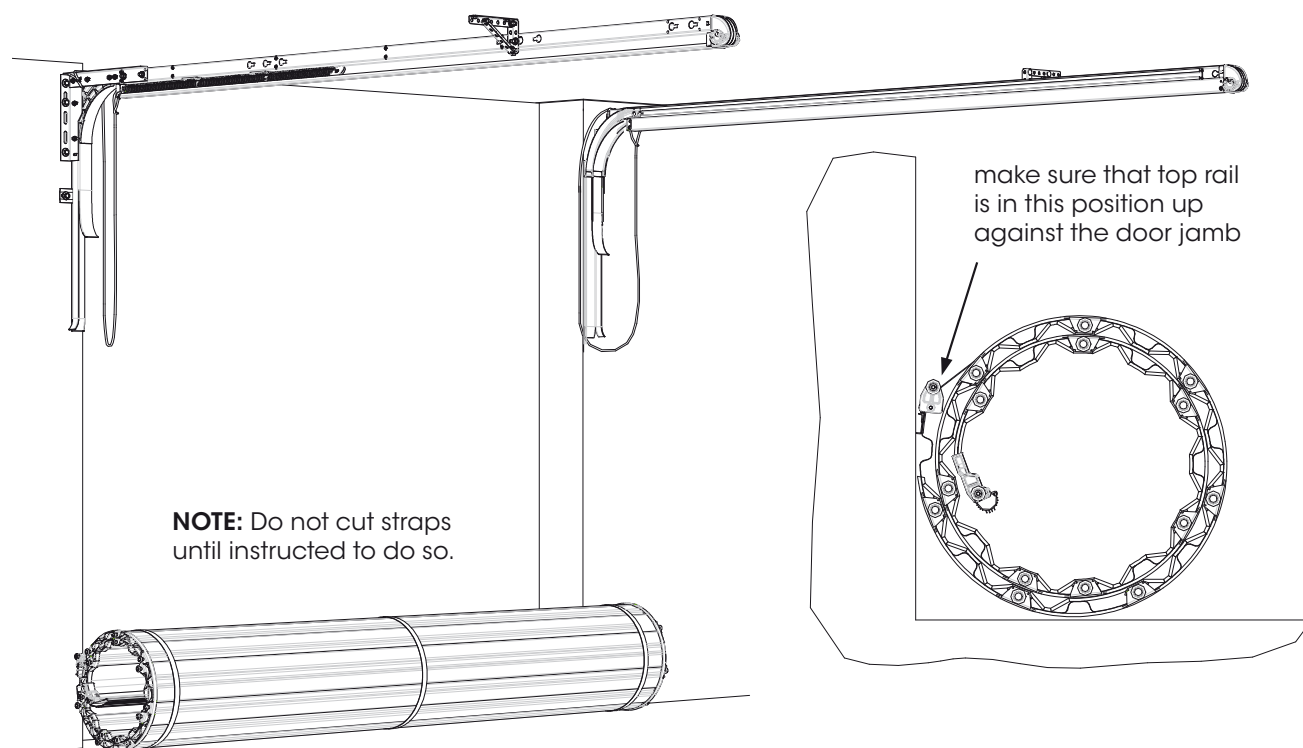


2.4 inserting the curtain

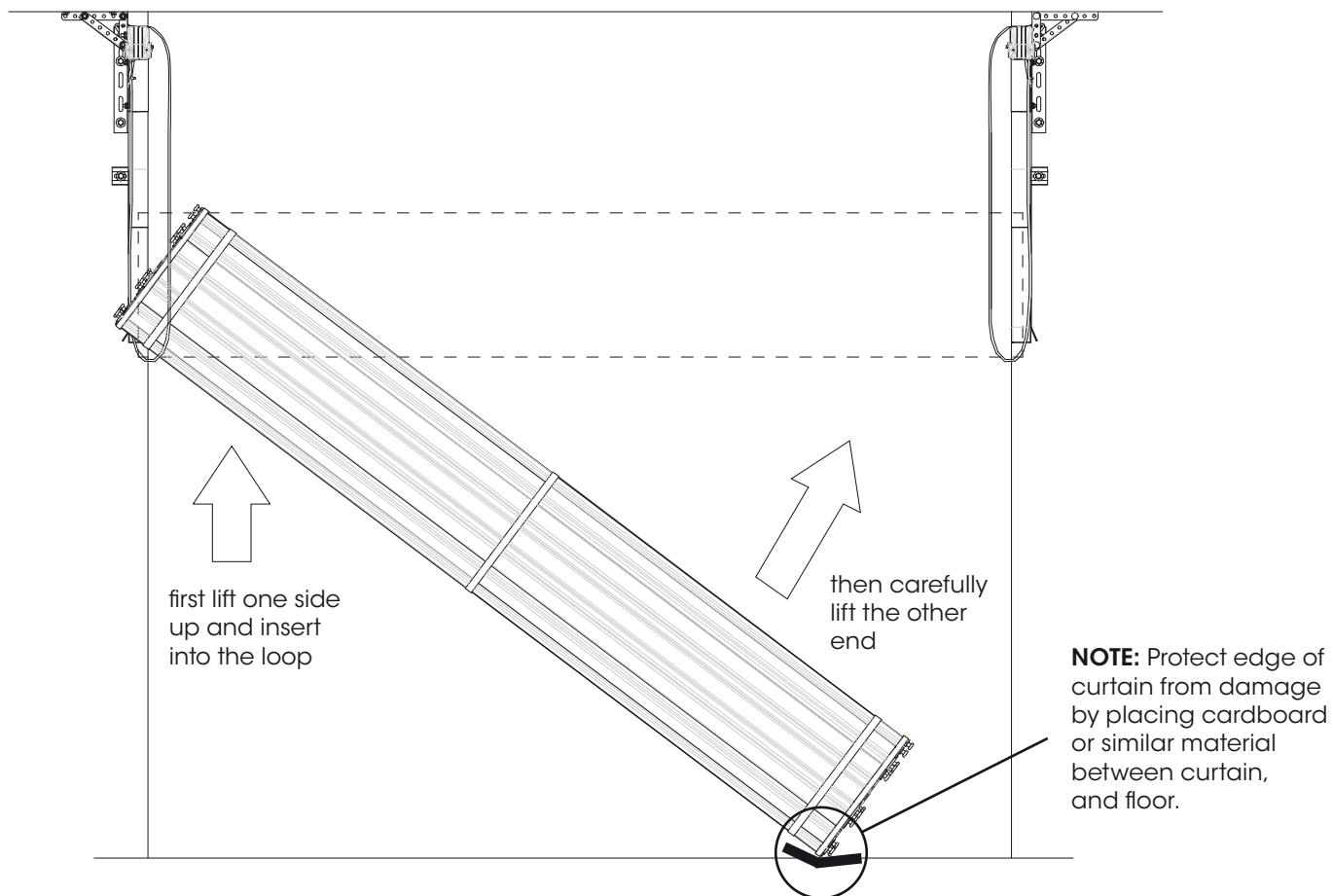
setting up the ropes/hooks adjustable straps



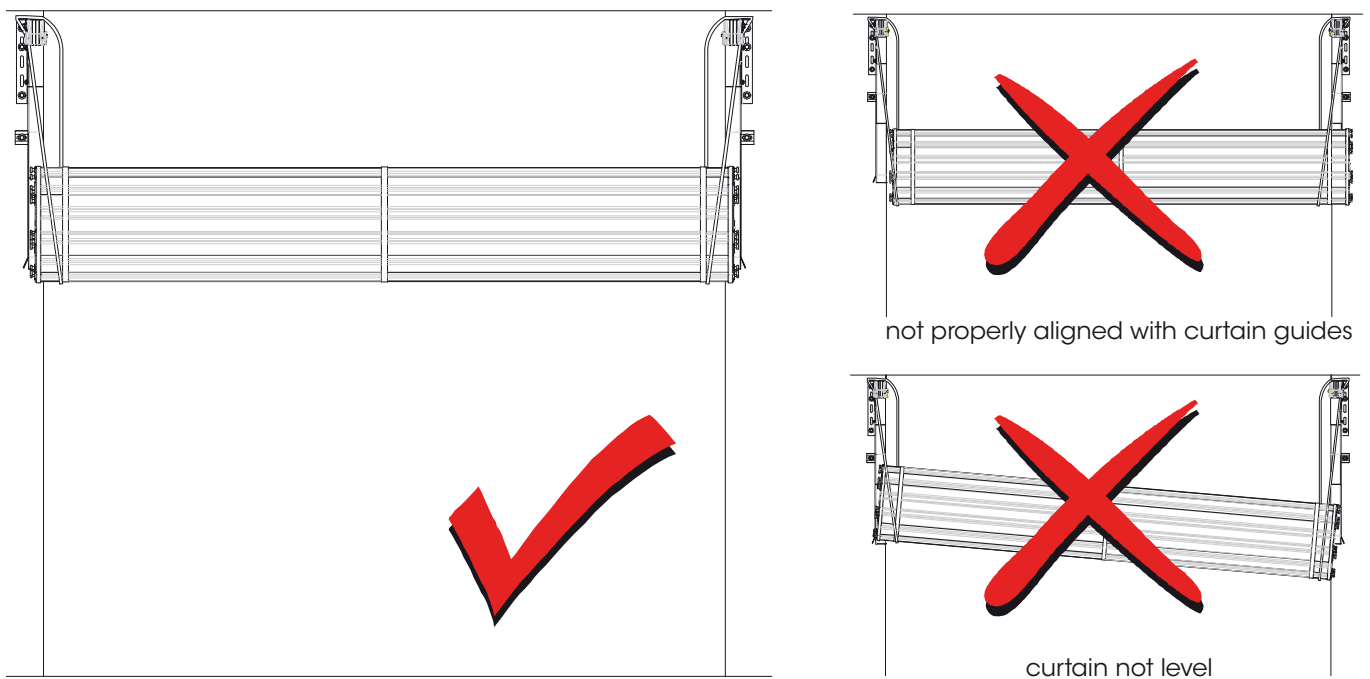
preparing to lift curtain



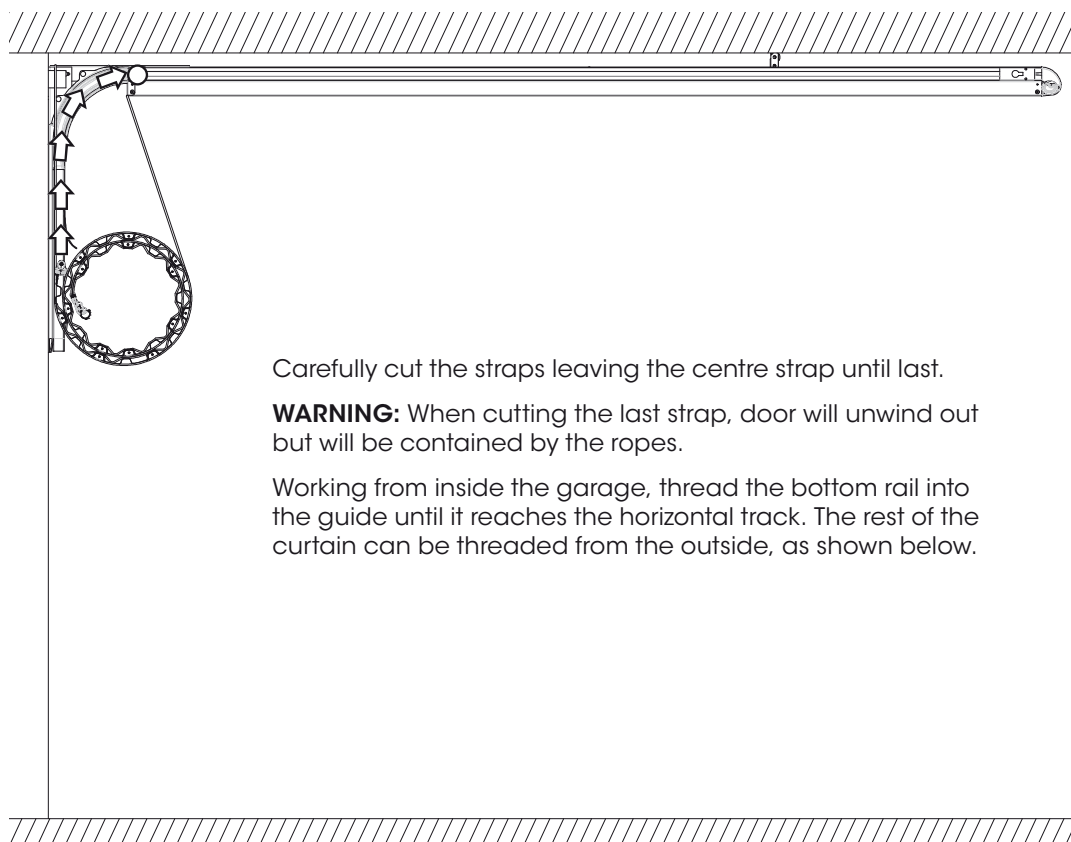
lifting curtain



centring curtain



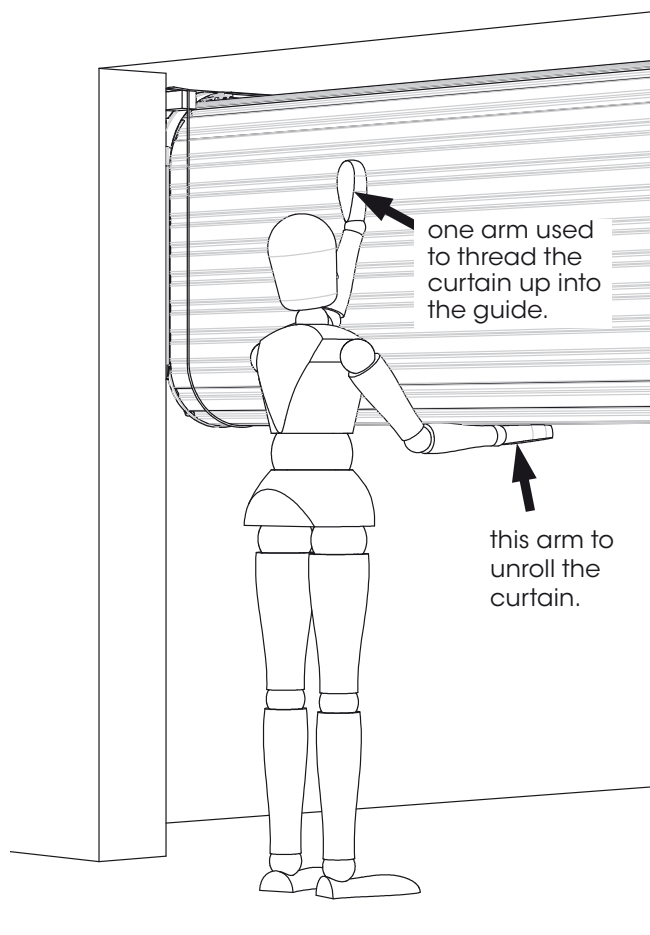
threading curtain into the guide



Carefully cut the straps leaving the centre strap until last.

WARNING: When cutting the last strap, door will unwind out but will be contained by the ropes.

Working from inside the garage, thread the bottom rail into the guide until it reaches the horizontal track. The rest of the curtain can be threaded from the outside, as shown below.



one arm used to thread the curtain up into the guide.

this arm to unroll the curtain.

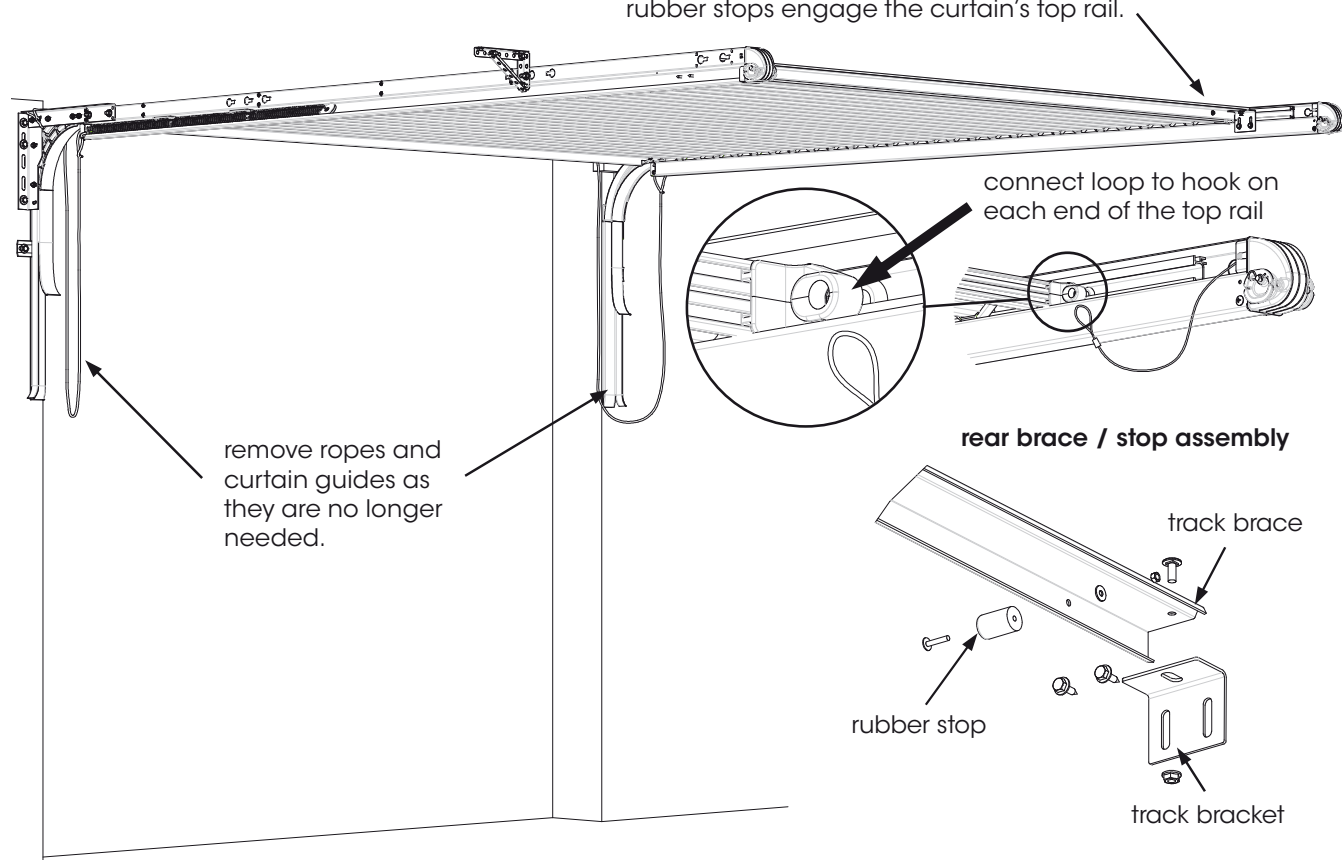
The remainder of the curtain can be easily threaded from the outside, as shown in the diagram. One arm is used to unroll the curtain and the other used to push the curtain up. In this way one hand is always on the curtain at all times.

Fully insert the curtain into the horizontal track.

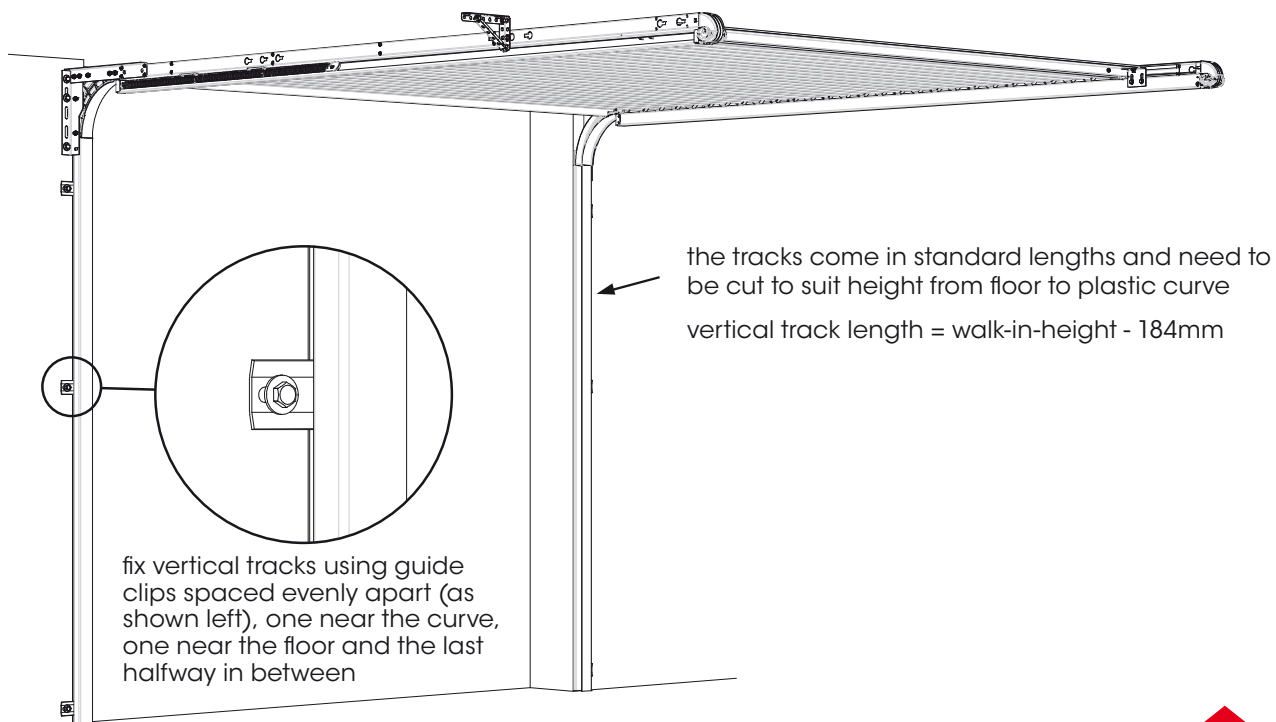
2.5 connecting the cable, adding the rear brace

WARNING: Fit Clamps to guides to prevent curtain accidentally slipping out of horizontal tracks.

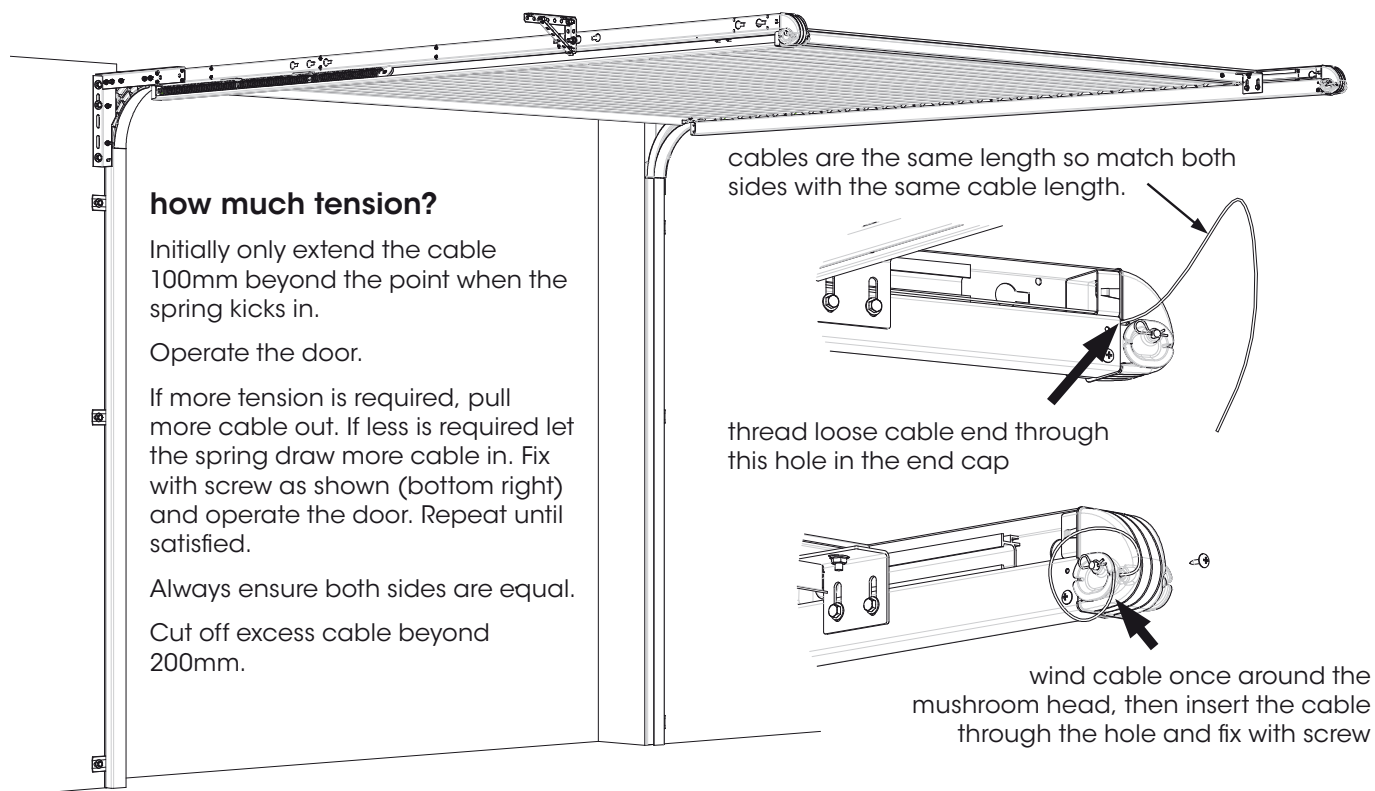
When installing the rear brace, ensure the curtain is in the desired open position (generally aligning the bottom rail with the desired opening height), then fit the brace so that the rubber stops engage the curtain's top rail.



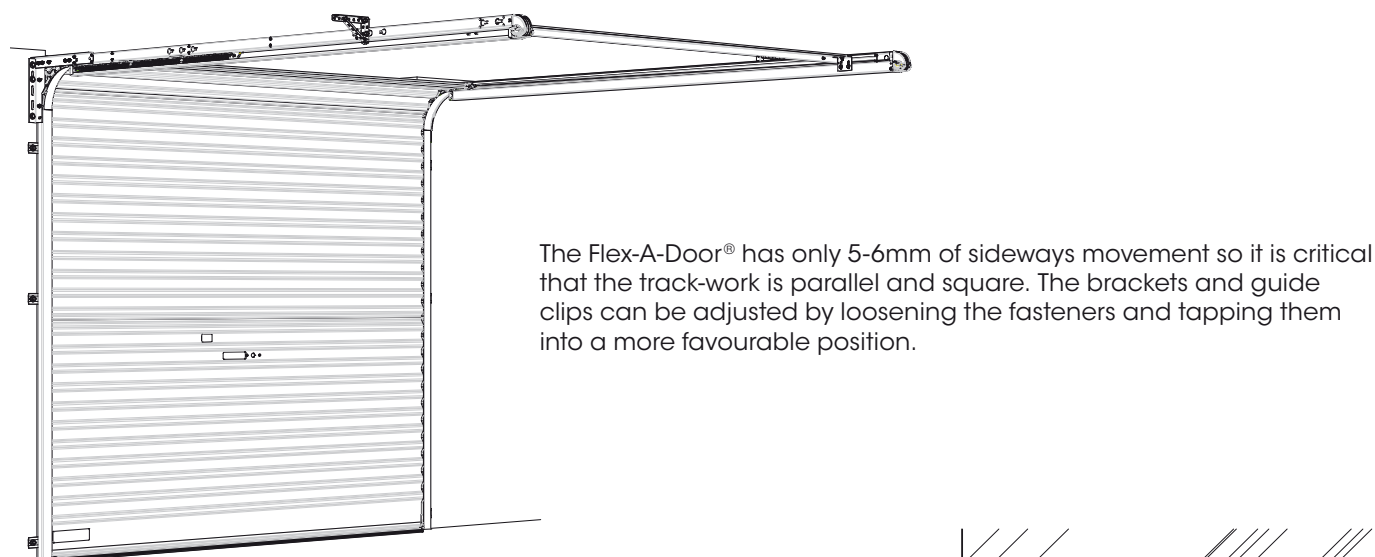
2.6 installing vertical tracks



2.7 connecting the spring counterbalance

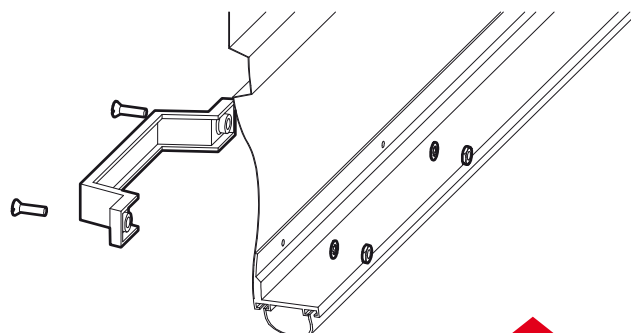


2.8 adjusting door



2.9 handle

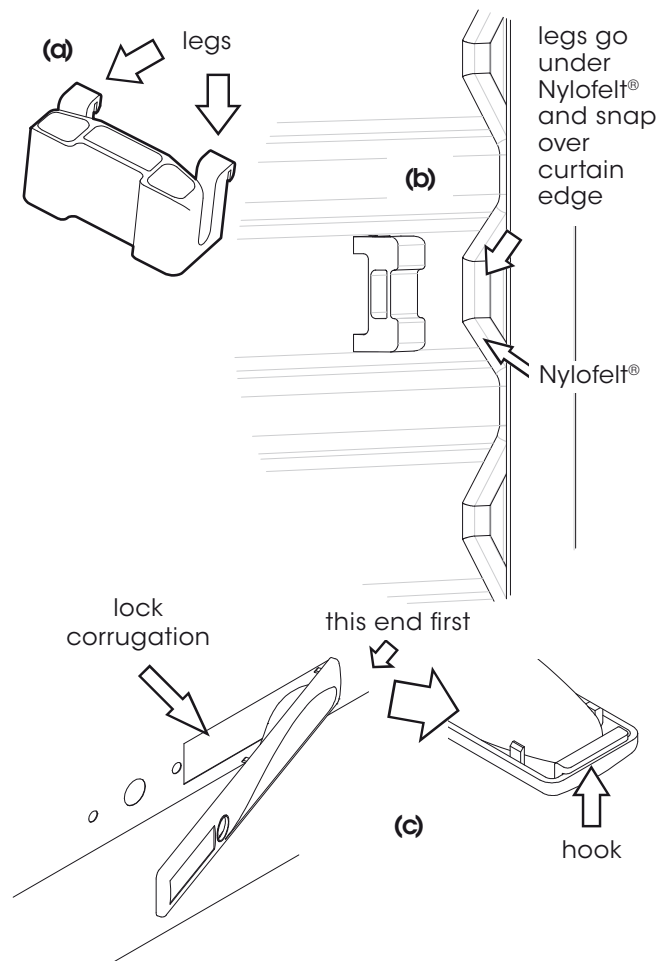
Fit the handle to the outside of the door using the screws, nuts and washers provided.



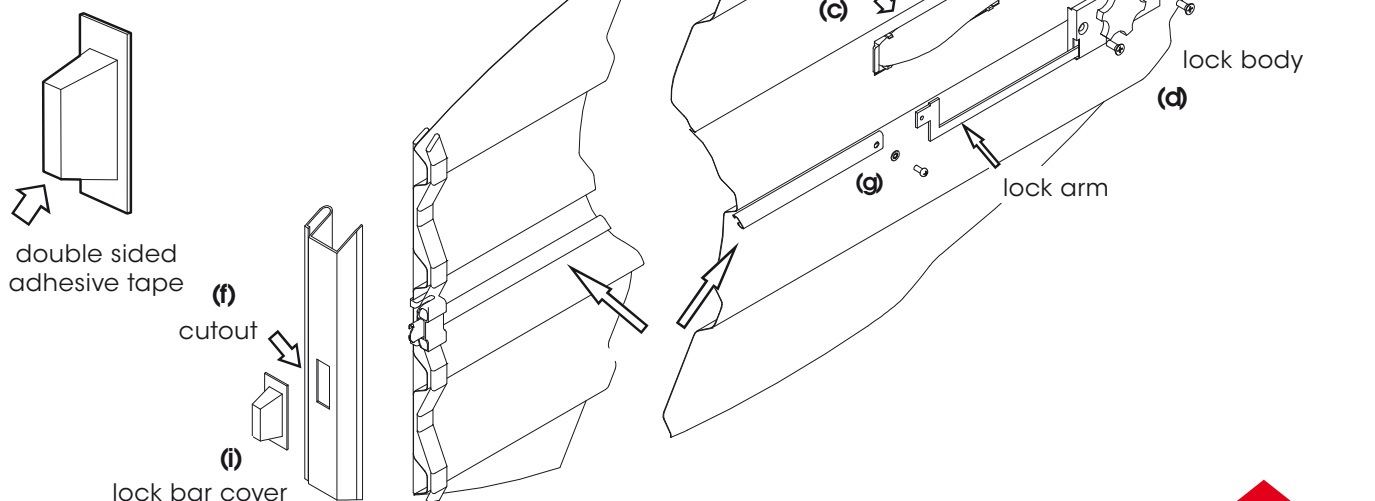
2.10 centre lift lock

1. Ensure curtain is in the closed position.
2. Install locking bar retainer, figure (a), in line with lock corrugation by pushing retainer towards door edge, sliding the legs under the Nylofelt® and hooking them over the curtain edge (it is easier to hook legs one at a time). Ensure lock bar retainers sit squarely on door curtain. See Fig (b).
3. Fit faceplate to outside of door where the hook will latch onto curtain edge, then slide faceplate as far to the right as possible, see figure (c). Use adhesive tape on outside to hold in position.
4. Attach the lock body to the faceplate from the inside, using the mounting screws. Do not over tighten the screws. See Fig (d).
5. With the door in the closed position slide the end of the locking bars through the locking bar retainers. While holding the bars level mark the side of the guides.
6. Drill and file out a rectangular slot no longer than 25mm and no wider than 10mm. Ensure top of slot remains in line with top of locking bar.
7. Slide bars through the guide slot, then back onto lock arms. Screw on securely using the 4mm x 6mm screws supplied. Ensure that locking bars do not protrude more than 20mm beyond guide when engaged in locked position, if so, trim to suit.
8. Ensure a clean and dry guide surface. Wipe guide with clean rag.
9. Peel off lining from lock bar cover and position over hole. Check that the movement of the locking bar is free.

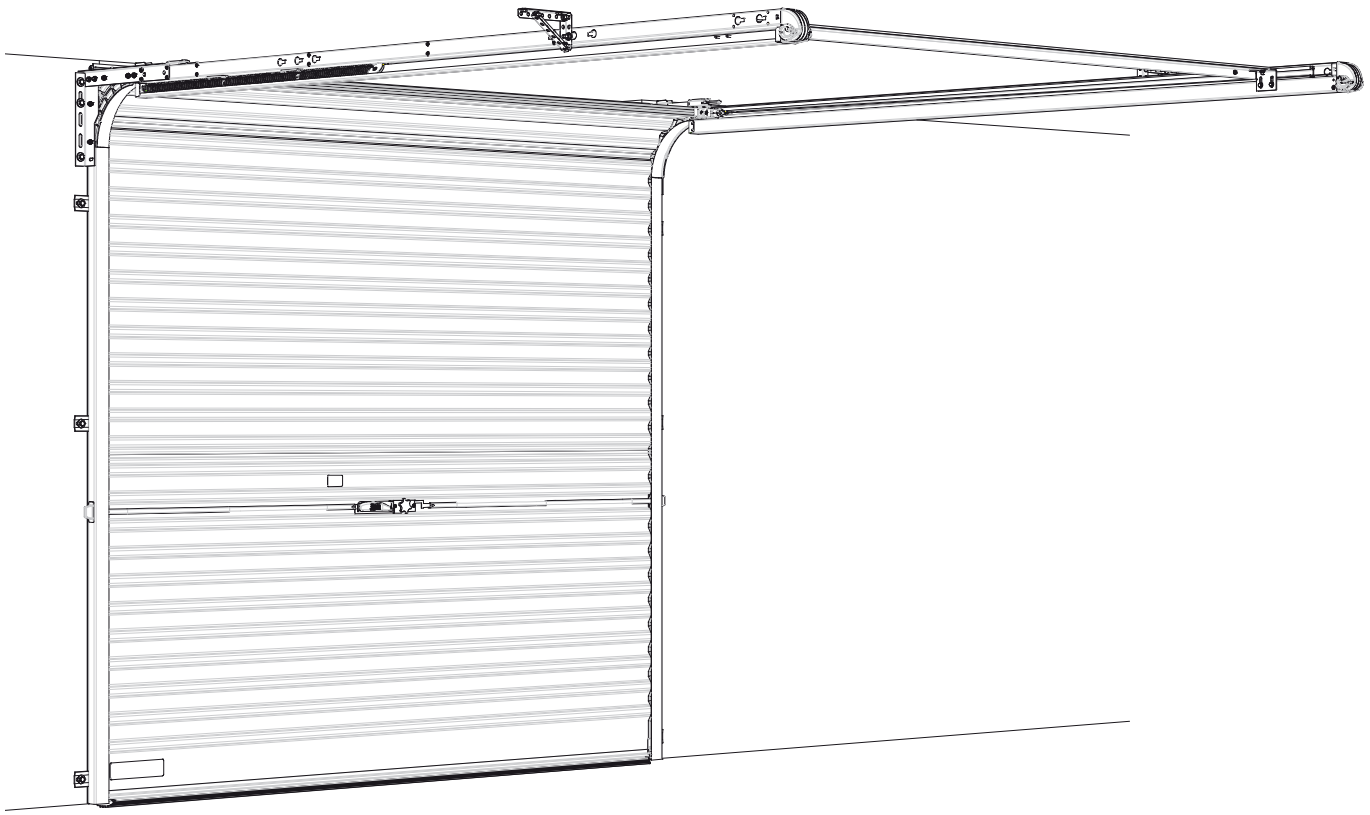
NOTE: The fitting of the lock bar covers is important to prevent possible finger entrapment - especially when the door is fitted with an automatic garage door opener.



lock bar cover



3.0 finished installation

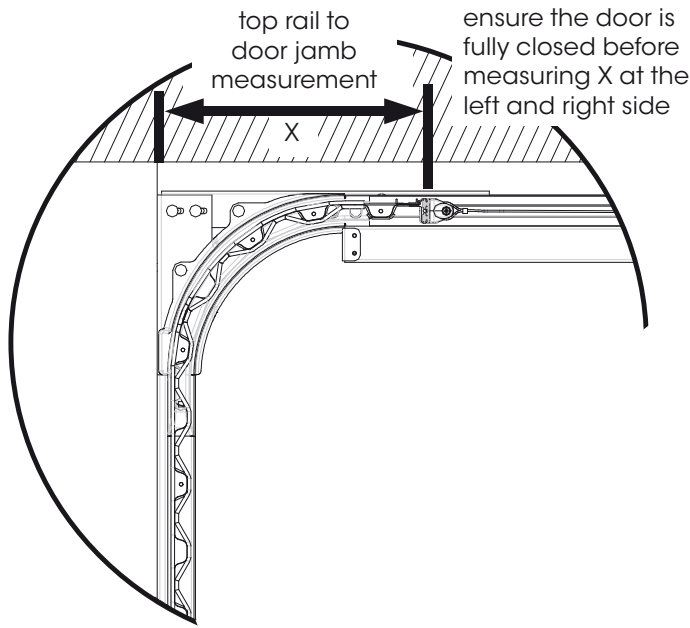


fixed head infill panels

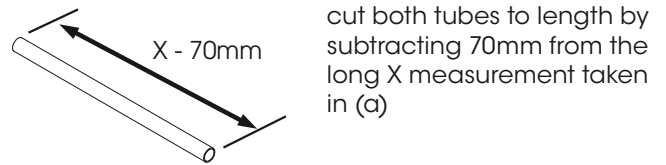
If walk-in height is not critical a fixed head infill panel can be used instead of the retractable head infill panel. A false head can also be fitted to improve the external appearance of garage opening. Note that the false head should be installed with ample clearance so the door curtain does not contact the head during door operation.

3.1 options: assembling the retractable head infill panel

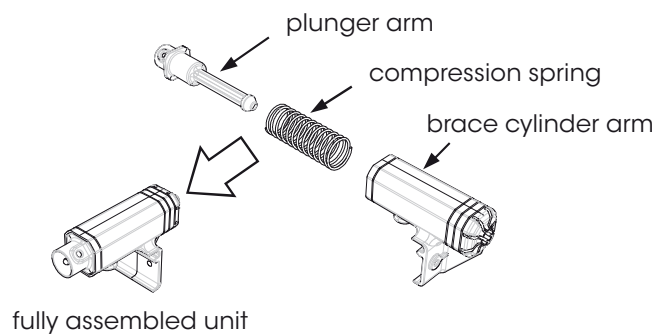
(a) top rail to door jamb measurement



(b) cutting the tube



(c) the brace cylinder arm assembly



connecting an overhead opener

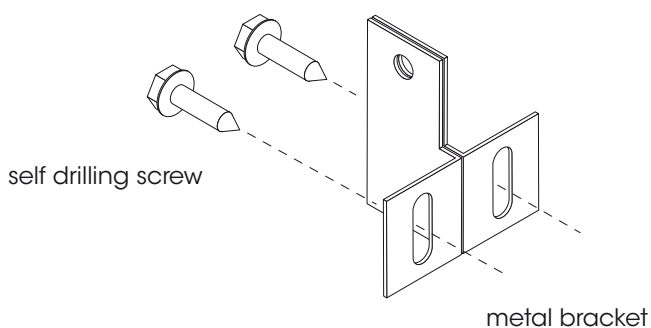
When fitting an overhead opener discard the straight and hockey stick shaped arms included with the opener, connecting the opener with them will be detrimental to the door.

Approximately 50mm clearance is required above the door and retractable infill panel for the opener 'C' rail.

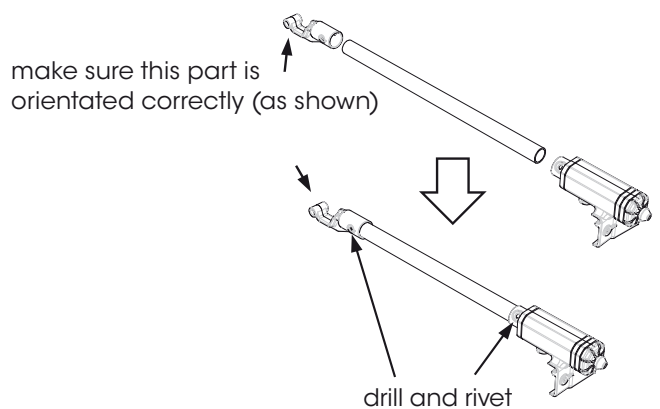
Connect the pressed metal bracket part no. 51748 to the centre of the top aluminium rail of the curtain using two self drilling screws, do not offset to one side.

The 'C' rail should be fitted parallel to the door curtain so that the bracket can be attached directly to the 'C' rail shuttle.

All other instructions are as per the opener instructions manual.

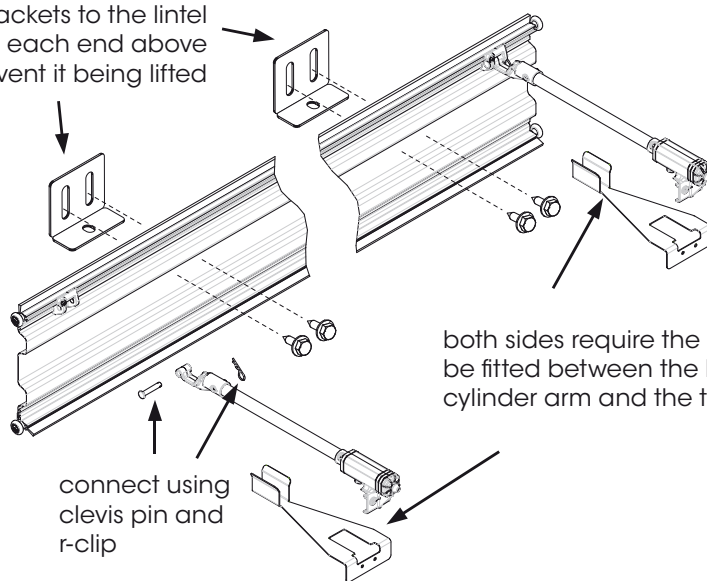


(d) the retractable head infill panel mechanism



(e) the retractable head infill panel assembly

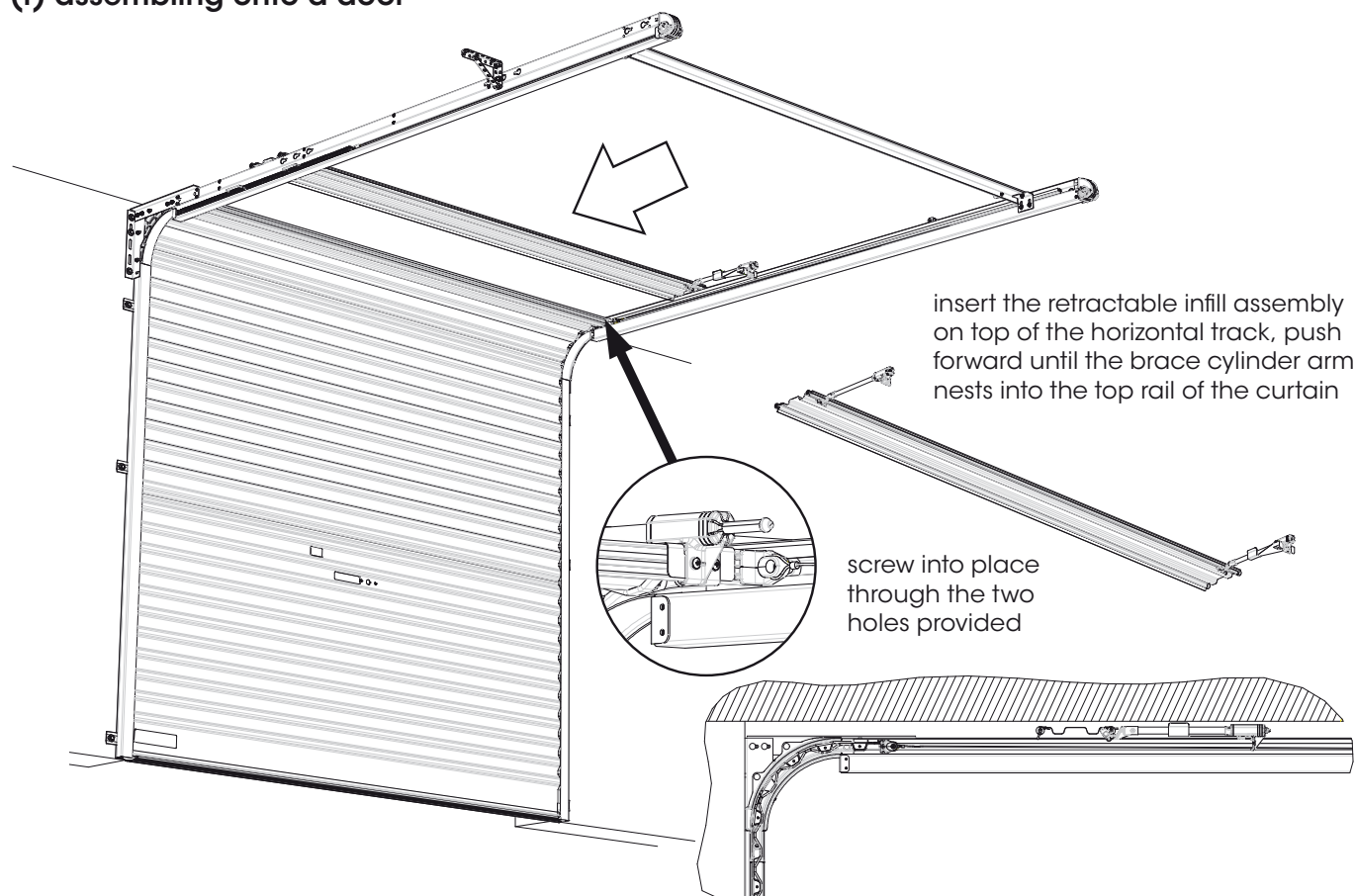
attach two angle brackets to the lintel approximately 300mm in from each end above the panel to prevent it being lifted



both sides require the guide to be fitted between the brace cylinder arm and the top rail

connect using clevis pin and r-clip

(f) assembling onto a door



insert the retractable infill assembly on top of the horizontal track, push forward until the brace cylinder arm nests into the top rail of the curtain

screw into place through the two holes provided

4.0 after installation care general care of your Flex-A-Door®

cleaning

BLUESCOPE COLORBOND® FINISH

Your B&D Flex-A-Door® has been pre-painted with a silicone modified polyester formulation, 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.

Washing of the door with clean water and a cloth every 14 days is recommended – particular care should be taken to clean areas of the door not normally washed by rain, including the top of the door roll inside the garage.

NOTE: In locations where there is likely to be salt in the air or industrial fallout is severe, more frequent washing is advisable and additional protection of the surface may be required.

Touch-up paint, if required, is available from your B&D dealer.

zinc coated steel finish

Painting of Bluescope zinc coated steel requires special attention. If you wish to paint this surface we recommend you seek advice from your nearest paint specialist or hardware store or by contacting Bluescope Steel for expert advice.

IMPORTANT: DO NOT paint inside the guide tracks or on the Nylofelt® running strips – remove paint immediately if it gets on these areas.

lock

Your lock does not require special maintenance, however, if the keyway becomes stiff, the application of powdered graphite is recommended – do not grease or oil the lock.

The plastic section of the faceplate should be washed with soapy water and rinsed well. Strong solvents, such as acetone, should not be used – these will damage the surface.

WARNING! Do not disassemble the lock mechanism and do not allow paint to enter the lock keyway.

When opening the door, always make sure the key is withdrawn from the lock – if this is not done, the lock mechanism could be damaged and the key bent or broken.

We suggest you record your full key letter and number on the front of this manual and if replacement keys are required they can be obtained from your nearest B&D office, simply by quoting this number. If the keys have been lost and the number not recorded, it can be found stamped into the locking arm at the back of the mechanism.

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 Mulgool Rd, Malaga 6090	Phone (08) 9247 8777
International/Export	34 Marigold St, Revesby 2212	Phone +61 (0)2 9722 5555

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Nylofelt®

On no account should you use grease or oil in the door guides or on the Nylofelt® running strips – the grease or oil will clog the Nylofelt® and spoil the operation of the door. An occasional wipe with a cloth dampened with mineral turpentine or mentholated spirits, down the inside of each guide, is very beneficial in removing any trace of grease or dirt. After the guides have been cleaned, a silicon spray may be used in the guides.

NOTE: WD40 or similar oil based sprays are not silicon and should not be used.

Care should be taken not to damage the Nylofelt®, however, if Nylofelt® is cut or damaged, a lighted match should be used to quickly seal the ends of the nylon braiding, so as to stop any further deterioration.

regular maintenance required

B&D recommends that you check the operation of your Flex-A-Door® at least every six months (more regularly in extreme environments or frequent use). The effort required to manually open and close the door should be about the same (if door has an automatic opener, put into manual mode before testing door). If the door is difficult to operate in either direction (up or down) then check: that the Nylofelt® running strips on each side of the door have not slipped from the edge and are jamming the door; that the door is running correctly in the guides and the guides are straight and perpendicular; and that the inside surfaces of the guides are clean and free of obstructions (see paragraph on care of Nylofelt®).

If you have checked these (and corrected where necessary) and 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.

To 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. If the door requires adjustment please contact a qualified B&D installer.

warranty

The B&D Flex-A-Door® in normal residential use is covered by a one year warranty for complete door and parts, conditional on proper care, as recommended above. Full details of the warranty are available, on request, from your nearest B&D office or visit the B&D website www.bnd.com.au

your representative is

b&d