

# Bloxwich Container Door J Seal Fitting General Guidance Notes

These general guidance notes briefly explain how to fit door J seals to container doors. They rely upon usage of the correct products, accurate measurements, suitable access equipment, experienced fitters, PPE, and suitable power and/or hand tools.

Container door seals are awkward to fit, so if it is possible to remove the doors from the container it will make fitting much easier. However, the basic fitting process is the same either way. Bloxwich recommend that at least two people fit the seals.

#### **General Container Door Seal Information**

A pair of container doors requires the seals to be 3-sided on one door and 4-sided on the other door (called the overlapping door and it's usually fitted with an overlapping plate or in some cases a lockbox).

Standard intermodal container door seals require an 18mm gap all around and in between the two doors for the seals to fit into.

Typically, 84 rivets are required for standard doors (8'6") and 90 for high cube (9'6") doors.

For the BCSP20079 Ø4.8mm X 15mm 304SS multigrip blind rivets the recommended drill size is 4.9 - 5.1mm.

If using straight lengths of seal the corners will require mitering and joining. We recommend using a powered miter saw to cut the seals and lightly clamping/holding them in position or fixtures to not distort the "J" shape while cutting and then a cyanoacrylate adhesive e.g. PERMABOND® 105 (or similar glue for EPDM rubber) to glue the corners (details can be supplied).

See Appendices 1 & 2 for further details.

#### Unpacking

Depending on the lengths, seals may be supplied rolled up and seal sets can be packed in a figure of eight format (to reduce space without putting stress on the thermally bonded corners). We recommend unrolling/unpacking and lying the seals/seal sets flat as soon as they arrives and for at least 24hrs before fitting.

#### **Typical Fitting Procedure (Replacement Seals)**

1. Grind or chisel off the existing rivet heads (BCSP20079).



- 2. Remove the seal retaining strips (BCSP14470). Note: If these are in good condition and can be reused take note or mark their position and orientation on each door (so they can be refitted in the same positions later as this will save having to drill the holes into the doors).
- 3. Remove the existing door seals.
- 4. Remove any glue, sealant, and dirt to leave the surfaces of the door as clean and dry as possible. Note: If the doors are badly corroded or damaged Bloxwich recommend suitable repairs and painting at this point.
- 5. Open the doors to at least 90°.
- 6. Starting with the overlapping door fit the door seal over the top of the door and then around the sides and finally the bottom (may require slight stretching to fit, do not use excessive force).
- 7. Fit/refit a seal-retaining strip to the top of the door. Ensuring the seal is pressed firmly against the front face of the door drill through one of the end holes in the seal-retaining strip. Loosely insert a rivet and repeat at the other end. If the seal looks good, fully fit the rivets and then repeat on the remaining holes.
- 8. Repeat step 7 on the sides and then the bottom end.
- 9. Check the door operates properly and closes easily.
- 10. For the other door fit the 3-sided seal over the top of the door and then down the outer side and around the bottom (may require slight stretching to fit the outer side, do not use excessive force). Clamp the free ends in place as required.
- 11. Fit/refit a seal-retaining strip to the outer side of the door. Ensuring the seal is pressed firmly against the front face of the door drill through the top hole in the seal-retaining strip. Loosely insert a rivet and repeat at the other end. If the seal looks good, fully fit the rivets and then repeat on the remaining holes.
- 12. Repeat step 11 on the top and then the bottom.
- 13. See appendix 2 and if required 3mm deep notch the front part of the seal in the centre for the overlapping seal. Depending on the door design, hinges used and if lockbox is fitted, additional notches may be required in order for the seals to fit properly.
- 14. Check the door operates properly and closes easily and that the overlapping door still does the same afterwards.
- 15. If required conduct a light leakage test from inside the container or a weather-proofness test from inside and outside of the container.

#### **Typical Fitting Procedure (New Containers)**

Start from step five above.

### Replacing a Damaged section of Seal

- 1. Grind or chisel off the existing rivet heads (BCSP20079) on the damaged side/area only.
- 2. Remove or partially remove the seal-retaining strip (BCSP14470).
- 3. Using a saw or sharp knife square cut the damaged section of door seal.
- 4. Remove any glue, sealant, and dirt to leave the surfaces of the door as clean and dry as possible. Note: If the doors are badly corroded or damaged Bloxwich recommend suitable repairs and painting at this point.



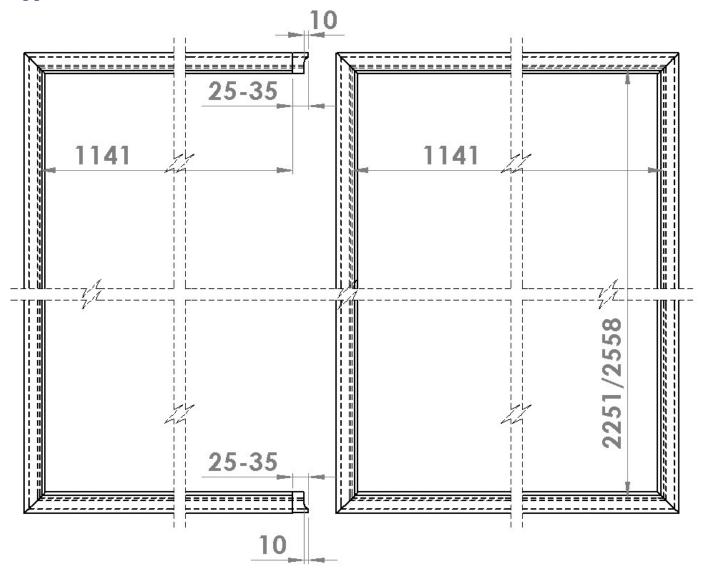
- 5. Measure the required replacement section and square cut to length.
- 6. Using a cyanoacrylate adhesive e.g. PERMABOND® 105 (or similar glue for EPDM rubber) match to the existing "J" profile at one end and hold in place until set (apx 9-10s).
- 7. Repeat step 6 for the other end.
- 8. Fit/refit the seal-retaining strip. Ensuring the seal is pressed firmly against the front face of the door drill through the holes in the seal-retaining strip. Loosely insert a rivet and repeat at the other end. If the seal looks good, fully fit the rivets and then repeat on the remaining holes.
- 9. Check the door operates properly and closes easily.

**Appendix 1** 





## **Appendix 2**



#### **Notes:**

Also, see:

<sup>&</sup>quot;Bloxwich Door Gear Assembly & Fitting Guidance Notes.docx"

<sup>&</sup>quot;Bloxwich Door Hinge & Door Fitting Guidance Notes.docx"

<sup>&</sup>quot;Bloxwich Container Door Compression Seal Fitting Guidance Notes.docx" https://www.bloxwichdoorgear.com/acatalog/Door-Seals.html