### Title: Amendment to alleviate constraints on Corner Protection Plates and Header Extension Plates.

Reference: Container designs undergo regular revisions and improvements driven by data analysis, field observations, and feedback with the goal of reducing maintenance needs, preventing, or minimizing damage, and prolonging the life of assets.

The objective: TB0-023 is to revise repair requirements, considering the latest container designs and prioritizing the preservation of original materials and coating systems whenever possible.

Below is a recapitulation of the changes being implemented in the repair manual, accompanied by the updated language on pages 81 and 82, along with visual representations in the form of photographs demonstrating limitations in the repair process.

Important Note\*: If there is damage to either the front or rear headers, it is necessary to address and repair them before proceeding with any repairs on the protection plate.

### **Corner Protection Plates \***

• Presently permitted repairs include straightening, welding, or substitution.

### Amendment:

• Effective immediately, only one patch or insert is permitted per corner protection plate. The size of the patch or insert should not surpass the original dimensions of the plate.

### **Header Extension Plates\***

• At present, acceptable repairs encompass straightening, welding, patching, or substitution.

### Amendment:

• Effective immediately, the inclusion of inserts is permitted, with the condition that the extension plate does not overlap the roof panel.

### \* Remarks:

- Extension plates repairs should have a minimum elevation of 6 mm below the upper face of the top corner fittings.
- Repairs on corner protection plates must not extend beyond the upper face of the top corner fittings.
- \* The thickness of all repair materials should match that of the original components. Please consult the owner if unsure.
- If there is damage to the front or rear headers, repair must be performed before addressing any issues with the protection plate.

Subsequently to the above amendments, Repair Manual for Steel Freight Containers, should read as follows:

### Page 81 amendments

#### 7.5 Corner Protection and Header Extension Plates

#### 7.5.1 General: Corner Protection Plates

Corner protection plates may undergo straightening and welding procedures as outlined in Section 2.8.2 on page 11, ensuring that the upper face of the repair plate does not extend beyond the upper face of the corner fittings. Additionally, a maximum of one patch or insert per corner protection plate is permissible, with the condition that the patch or insert size does not surpass the original dimensions of the plate.

For the installation of a patch or insert, adhere to the procedures provided in Section 2.8.3 on pages 11-14. If these measures are not feasible, proceed with plate replacement following the recommended procedures in Section 2.8.5 on pages 16-18.

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#### 7.5.2 General: Header Extension Plates

Header Extension plates can undergo straightening and welding. Alternatively, they are eligible for patching or insertion provided that the highest point on the installed patch/insert remains at least 6 mm (1/4 in) below the level of the upper face of the top corner fittings. To execute the installation of a patch/insert, refer to the procedures outlined in Section 2.8.3 on pages 11-14. The interior lapped seam should be skip-welded and caulked or fully welded, depending on the owner's policy. If these approaches are impractical or if economic considerations necessitate, replacement of the plate is required.

#### 7.5.3 Corner Protection and Header Extension Plate Replacement

To substitute these plates, adhere to the guidelines provided in Section 2.8.5 on pages 16-18. Specific considerations for such replacements are outlined below:

#### 7.5.3.1

■ Replacement Material: The new plate must have a minimum thickness of 3.2 mm (10 gauge) and be composed of the same material as the original (or Corten steel if the original material is unknown).

#### 7.5.3.2

■ Installing the replacement plate: The plate should be positioned around the corner fitting, extending a minimum of 38 cm (15 in) along the top side and header rails. Replacement plates should overlap the current roof panel, following the same pattern as the original roof or by at least 13 mm (1/2 in).

#### 7.5.3.3

• Completing the repair: The internal seam between the top side rails and the plate should either undergo skip-welding and caulking at the seams or be fully caulked.



Non-conforming patch exceeds the original size of the Corner Protection Plate.



Acceptable insert on corner protection plate. Any damage to the front header must have been repaired prior to insert installation. Repair shall not protrude above the upper face of the corner fitting.



Non-conforming patch to the corner protection plate, overlaps the front header.



Acceptable insert on corner protection plate. Any damage to the header must have been repaired prior to insert installation.



Non-conforming repair.

The section of the corner protection plate was cut-out but not restored.





Proper replacement of the corner protection plate after installation of insert on the front header.





Proper insert to the header extension plate.



Non-conforming repair. The damaged area filled with weld without restoring original profile of the rear Header and corner protection plate.



Proper replacement of the corner protection plate after installation of insert on the extension plate.



Proper replacement of the corner protection plate after installation of insert on the front header.



Non-conforming repair: insert installed on the corner protection plate however no insert installed on the extension plate.