



September 25th, 2020

IICL Technical Bulletin - TB-023 - rev 1 / 23 Oct 2020

Title: Amendment to repair limitations on Corner Protection Plates & Header Extension Plates.

Reference: Container designs are frequently revised and enhanced based on data analysis and field observations and feedback aiming to reduce maintenance, prevent, or minimize damage and extend asset life.

Purpose: TB0- 023 aims to update repair requirements taking into consideration new container designs, preserving the original materials and coating systems as much as possible.

Here below is the summary of the amendments being introduced to the repair manual followed by the revised wording on pages 81 & 82 and photographs illustrating repair limitations.

Important Note*: In case front or rear headers are damaged, they must be repaired prior to conducting repairs on the protection plate.

Corner Protection Plates *

- Current repairs allowed – straightening, welding, or replacement.

Amendment:

- With immediate effect, a ***maximum of one patch or insert per corner protection plate is allowed. Patch or insert size shall not exceed the original size of the plate.***

Header Extension Plates*

- Current repairs allowed – straightening, welding, patching or replacement.

Amendment:

- With immediate effect, ***inserts are also allowed provided that the extension plate does not overlap the roof panel.***

* Remarks:

- ❖ Repairs on extension plates must be at least 6 mm lower than the upper face of the top corner fittings.
- ❖ Repairs on corner protection plates shall not protrude above the upper face of the top corner fittings.
- ❖ All repair materials must be of the same thickness of the original components. Contact owner if uncertain.
- ❖ In case front or rear headers are damaged, they must be repaired prior to conducting repairs on the protection plate.

Subsequently to the above amendments, the 5th Edition of the IICL Repair Manual for Steel Freight Containers, should read as follows:



Page 82 amendments

7.5.2 General: Header Extension Plates

Header extension plates may be straightened and welded. They may also be patched or inserted if the highest point on the installed patch/insert is at least 6 mm ($\frac{1}{4}$ in) below the level of the upper face of the top corner fittings. To install a patch/insert, follow the procedures recommended in Section 2.8.3 on pages 11 - 14. The interior lapped seam must be skip welded and caulked or fully welded, according to the owner's policy. If these methods are not possible, or if economics so dictate, the plate must be replaced.

7.5.3 Corner Protection and Header Extension Plate Replacement

To replace these plates, follow the procedures recommended in Section 2.8.5 on pages 16 - 18. Special considerations for these replacements follow:

7.5.3.1

■ Replacement material: The replacement plate must be a minimum of 3.2 mm (10 gauge) thick and of the same material as the original (or Corten steel if unknown).

7.5.3.2

■ Fitting the replacement plate: The plate should be fitted around the corner fitting and extend at least 38 cm (15 in) along the top side and header rails. Replacement plates should overlap the existing roof panel in the same manner as in the original roof or by at least 13 mm ($\frac{1}{2}$ in).

7.5.3.3

■ Completing the repair: The interior seam between the top side rails and the plate must be skip-welded and caulked between the seams, or fully caulked.

Page 81 amendments

7.5 Corner Protection and Header Extension Plates

7.5.1 General: Corner Protection Plates

Corner protection plates may be straightened and welded according to the procedures recommended in Section 2.8.2 on page 11, provided the upper face of the repair plate does not protrude above the upper face of the corner fittings. In addition, a maximum of one patch or insert per corner protection plate is allowed. Patch or insert size shall not exceed the original size of the plate. To install a patch or insert follow the procedures recommended in Section 2.8.3 on pages 11 - 14. If this is not possible, replace the plate according to the procedures recommended for replacement in Section 2.8.5 on pages 16 - 18.



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



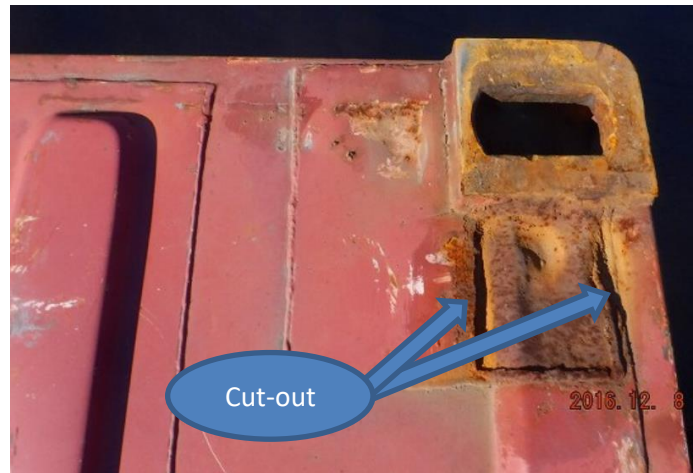
Acceptable insert on corner protection plate. Any damage to the front header must have been repaired prior to insert installation. Repair shall not protrude above the upper face of the corner fitting.



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.

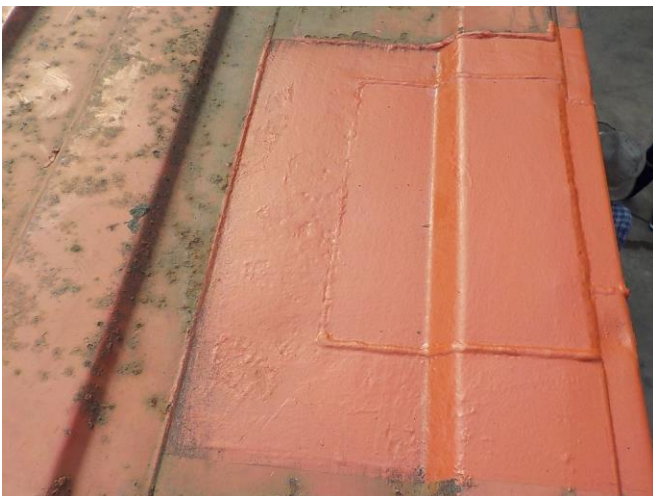


Non-conforming repair.

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. 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.

This technical bulletin was prepared under the supervision of the IICL Technology Committee.
For questions about this technical bulletin you may contact technical@iicl.org