



January 27, 2021

## IICL Refrigerated Container Technical Bulletin – RTB 007 rev1.

**Title:** Repair limitations on Corner Protection Plates & Header Extension Plates.

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

**Purpose:** RTB 007 aims to update repair requirements taking into consideration new container designs and preserving the original materials and design as much as possible, while performing proper repairs.

Here below are amendments being introduced to the General **Guide for Refrigerated Container Inspection and repair, 4th Edition.**

**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 \*

- Repairs allowed – straightening, welding, patching or replacement.
- *A maximum of one patch per corner protection plate is allowed. Patch size shall not exceed the original size of the plate.*
- Repairs on corner protection plates shall not protrude above the upper face of the top corner fittings.

### Header Extension Plates\*

- Current repairs allowed – straightening, welding, patching or replacement.
- Repairs on extension plates must be at least 6 mm lower than the upper face of the top corner fittings.

#### \* 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.



## **Repair Procedures for Corner Protection and Header Extension Plates.**

### **General: Corner Protection Plates**

Corner protection plates may be straightened and welded according to the procedures recommended in Sections 6.4.1 and 6.4.6 provided the weld seam, or the upper face of the plate does not protrude above the upper face of the corner fittings.

A maximum of one patch per corner protection plate is allowed. Patch size shall not exceed the original size of the plate. To install a patch, follow the procedures recommended in Section 6.4.3. If this is not possible, replace the plate according to the procedures recommended for replacement in Section 6. Patch shall not extend beyond the size of the original plate.

No riveted patch allowed.

### **General: Header Extension Plates**

Header extension plates may be straightened and welded. They may also be patched if the highest point on the installed patch is at least 6 mm (1/4 in) below the level of the upper face of the top corner fittings. To install a patch, follow the procedures recommended in Section 6.4.3 or 6.4.5.

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

To replace these plates, follow the procedures recommended in Section 5.



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



Acceptable patch on Corner Protection Plate. Patch does not protrude above the upper face of the top corner fitting or exceed the size of the original corner protection plate.



Non-conforming repair on Corner Protection Plate. Patch exceeds original size of Corner Protection Plate. Excessive corrosion likely due to poor coating applied.

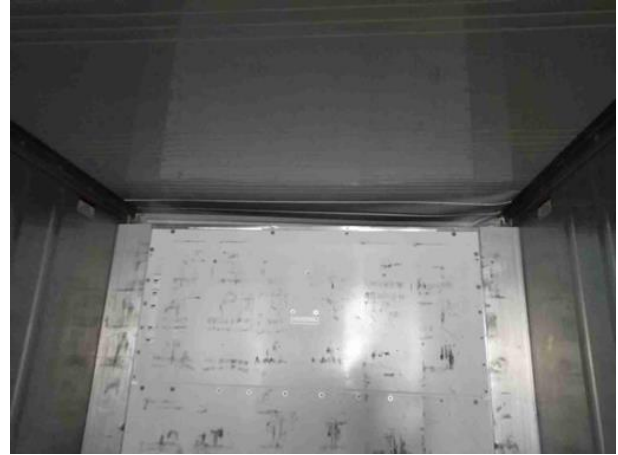


Proper replacement of the Corner Protection Plate below the upper face of the top corner fittings after inserting rear header.



Above photos show different damage conditions to Corner Protection Plates, Extension Plates, top Side Rails and Headers. Often these damages are caused by twist locks during loading/unloading operations despite the existence of reinforcements. To avoid extensive water damage to the insulation, damages breaching the external cladding should be repaired as soon as possible.





Damages to Corner protection Plates and Extension Plates frequently impact the interior of refrigerated containers. Careful inspection is important to determine need for repairs on consequential damages.



Proper repairs performed on Corner Protection Plates after repairing damaged Extension Plate and / or Header.



Non-conforming repair. Damage to Corner protection Plate and Top Side Rail patched over. The size of the patch exceeds the size of the original corner protection plate and the top side rail was not repaired prior to installation of the patch. Rework required.



Rear Header and Corner Protection Plate repair sequence.

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](mailto:technical@iicl.org)