

COA Criteria for Cargo-Worthy (CCW) comparison to Unified Container Inspection & Repair Criteria (UCIRC)

Component	Damage Condition/Tolerance	Cargo-Worthy	UCIRC
Top Side Rails	Dents in excess of 30mm	Straighten or Weld, or straighten and weld, or insert, or section, or renew	Deformation in excess of 30mm
	Holed, Cut, torn, broken, cracked		Holed, Cut, torn, broken, cracked
Bottom Side Rails	Holed, Cut, torn, broken, cracked	Straighten or Weld, or straighten and weld, or insert, or section, or renew	Holed, Cut, torn, broken, cracked
	<u>Web</u> : Dents in excess of 50mm, <u>Flanges</u> : no limit		Deformation in excess of 50mm
	<u>Flanges</u> : Crack or tears which extend into web radius	Weld or straighten and weld	Cracks or tears which extend into web radius
Front & rear headers	Dents in excess of 40mm Holed, Cut, torn, broken, cracked	Straighten or Weld, or straighten and weld, or insert, or section, or renew	Deformation in excess of 40mm Holed, Cut, torn, broken, cracked
	<u>Flanges</u> : Crack or tears which extend into web radius	Weld or straighten and weld	
	<u>Rear header</u> : Gouge, dents or bent	Must not interfere with door operation.	
Rain gutter	Cut / gouged / bent	Must not interfere with door operation.	
Front & rear sill	Holed, Cut, torn, broken, cracked	Straighten or Weld, or straighten and weld, or insert, or section, or renew	Holed, Cut, torn, broken, cracked
	<u>Web</u> : Dents in excess of 50mm. <u>Flanges</u> : no limit.		50mm
	<u>Flanges</u> : Crack or tears which extend into web radius	Weld or straighten and weld	
Corner posts	Dents in excess of 25mm, unlimited number of dents. Holed, Cut, torn, broken, cracked	Straighten or weld, or weld and straighten, or insert, or renew	Dents exceeding 20mm Holed, Cut, torn, broken, cracked
	<u>J-bar</u> : Gouge, dents or bent	Must not obstruct operation of door	Interfering with door operation
Corner castings	Cracked, deformed, broken or preventing twist-lock operation	Replace	Cracked, deformed, broken Deformation preventing correct twist-lock operation

Fork-lift pockets members or strap and gooseneck tunnel assembly	Holed, Cut, torn, broken, cracked or missing	Straighten or weld, or straighten and weld, or insert, or renew	Top plate separation from floor in excess of 10 mm or floor screws ineffective
	<u>Top plate</u> : separation from floor in excess of 10mm or floor screws ineffective, pushed up in excess of 50mm.		
	<u>Web</u> : Cut or tear in excess of 600mm or extending into web radius.		
	<u>Lower flanges</u> : Crack or tears which extend into web radius	Weld or straighten and weld	Lower flange connection to bottom side rail, holed, cut, torn, cracked extending into web radius
Cross members,	<u>Web</u> : Dents in excess of 75mm. <u>Flanges</u> : no limit Holed, Cut, torn, broken, cracked	Straighten or weld, or straighten and weld, or insert, or renew	Web deformed in excess of 75mm Web holed, torn, broken, cracked, cut or missing
	Bowed up to more than 50mm or below corner casting	Straighten or Renew	Bowed up by more than 50 mm or below line of corner castings
	Separation from floor more than 15mm	Straighten and prefix or renew	Web upper flange separated from floor by more than 10mm
Rails, sills, crossmembers	Corrosion	Holed – repair Use inspection hammer only when essential to investigate severe corrosion e.g. blisters to a structural component.	Corrosion, not due to paint failure, which causes loss of structural integrity
Component	Damage Condition/Tolerance	Recommended Repair Guidelines	
Floor boards, panels, planks	Broken or missing	Overlay or Section or Renew	
	Gouged greater than 15mm deep and 150mm wide		Gouge greater than 15 mm deep irrespective of length or more than 6mm deep and greater than 150mm wide irrespective of length

	Height mismatch greater than 10mm	Re-secure or Refasten	Difference in height between adjacent planks/panels greater than 10 mm
	Delamination if structural integrity severely weakened	Repair	Delamination or other damage (affecting floor strength)
Floor screws	If 3 or more adjacent loose, broken missing fasteners	Refasten or renew	Three or more adjacent broken/loose, missing fasteners
	Protruding	Refasten	Protruding

Doors	Not operational and light tight	Repair	deformation affecting security and operation of door
	Holed, Cut, torn, broken, cracked	Straighten and weld or patch or insert, or renew	Holed, cut, torn, broken, cracked component and/or weld or
Gaskets	Loose or not light tight or impedes door operation	Repair	Loose parts which affect door operation or water- tightness
Door hardware	Missing, Broken or not operational	Refasten, or welds, or renew	Missing / broken or loose parts which affect door operation or water-tightness
Data plates	Loose, missing	Refasten or renew	Loose, missing
Sides, Ends and Roof panels including Header plates	Dents into cube by more than 50mm on Sides/Ends, and by more than 70mm from roof inner corrugation to floor top surface	Straighten	Dents into cube which reduce the internal width by more than 50mm from the inner corrugation including multiple dents, or 70mm from the floor to the roof inner corrugation
	Dents out of the ISO corner castings face corner +40mm on Sides or Ends, and +50mm on Roof		Dents exceeding the outer face of corner castings +40 mm
	Holed, Cut, torn, broken, cracked	Straighten and weld or patch	Holed, torn or cut
	Corrosion	Holed – weld or patch Only use inspection hammer to investigate heavy corrosion to a structural component.	
Air vents	Missing/Broken	Renew	Vents blocked, loose, damaged and not weather tight, missing

Lashing rings	Missing/Broken	Reweld or Renew	Broken, cracked or missing or non-functional
Frame & base structural members	Dents out of the ISO corner castings face +10mm on the side or lower face or +5mm on the ends	Straighten	+10 mm on the side face and ISO +5mm on the end face
	Crossmember: deformation below corner casting	Straighten	
Cleaning	Contamination impedes loading of cargo or transferable	Remove or sweep or jet wash.	Clean and/or remove
	Hazard marks	Remove	Remaining on panels
	Offensive graffiti	Remove or paint over	Remove/repair
	Dangerous goods cargo residue	Clean in accordance with safe procedures	
	Nails	No action unless impedes cargo loading	Protruding, remove
	Foreign Lashing material that impedes securing of cargo	Remove	Remove/repair
	Glue or tape	Remove if it impedes loading cargo	Clean and/or paint
Improper previous repairs	Not to IICL but structurally safe	No Action	Previous repairs should not be reworked unless the structural integrity of the container is compromised or it is unsuitable for cargo.
	Structurally unsafe or structural integrity severely weakened	Rework to structurally sound	
Markings	ISO decals and Data plate(S) : missing or illegible	Renew	Missing or illegible
	Non-ISO decals	No Action	
	CSC examination NED	Examination according to owners approved procedure	

Cargo-Worthy repair guidance comparison with UCIRC

When a component is identified by the container inspector as unacceptable condition and requiring repair, the basic principle is to select the most economical method to repair the container to within Cargo-Worthy Inspection criteria. Repairs shall be structurally sound in compliance to CSC approved procedures.

Component:	CCW Repair Guidance	UCIRC Repair Guidance
General	Cargo-Worthy criteria describes the structural condition of an ISO Dry Freight General Purpose container when assessed to be acceptable for transport on a one-way trip as a shipper owned container (SOC).	<p>The criteria should not vary between an in-service and on / off hire survey inspection and should be accepted on a universal basis by shipping lines, container leasing companies and container operators supporting these criteria for all general worldwide container interchanges</p> <p>Any user of these criteria requiring a standard above that detailed in the criteria should negotiate directly with the depot and/or owner/operator concerned</p>
	Minimum repair to achieve structural integrity appropriate to the container rating and owners CSC approved procedure, light tightness and full operational use.	The tolerances/permitted damages listed are not the minimum necessary to meet basic safety requirements but are selected to ensure the container is serviceable, while minimising the need for repair and thereby preserving asset life
	Materials required for repairs may be previously used (cannibalised) components providing the material specification and thickness is equal to the container original specification and rating.	The repair method selected should be the most economical and suit the particular repair location
	Welded repairs only, do not use bitumen or tape. Cosmetic repairs not required	The repair method selected should be the most economical and suit the particular repair location
		Items not specifically detailed in the criteria are covered by this general introduction only if they require repair

Corrosion holes	Spot weld panel small holes where practical. Do not grind flush. Over patch panel holes if too large for spot weld. It is not required to cut-away corroded material.	The repair method selected should be the most economical and suit the particular repair location
Straightening	Straighten to within the Cargo-Worthy criteria. Repairing precisely to the original profile is not required.	The repair method selected should be the most economical and suit the particular repair location
Cuts and cracks	Weld as necessary	The repair method selected should be the most economical and suit the particular repair location
Paint	Paint welded repairs only. No paint required to under structure repairs. No cosmetic painting of corrosion or scratches.	The repair method selected should be the most economical and suit the particular repair location
Side, end, and roof panels	Straighten and weld whenever possible to within the acceptable criteria. Spot weld panel small holes where practical. Do not grind smooth / flush. Over patch panel holes without removing corroded material.	The repair method selected should be the most economical and suit the particular repair location
Floors	Broken floors should be repaired by overlaying a 4 mm thick (minimum) steel plate covering a minimum of 2 crossmembers and screwed through the floor to the top flange of the crossmember. The distance between floor screws attaching the plate to crossmembers should not exceed 150mm. The damaged area should be overlapped by at least 150mm on its sides and screwed to the floor. Screws should be no more than 150mm apart. If a floor section is required it may be supported by only 2 crossmembers. Sealant repair water-light leaks from nail or peg holes. Surface delamination - remove loose veneers or secure by nailing.	The repair method selected should be the most economical and suit the particular repair location
Acceptable damage		Defined as damage that is not to be repaired and includes: all flange damage except to weld connections; deformation of structural members up to ISO +10 mm on the side face and ISO +5 mm on the end face; previous repairs should not be reworked unless the structural integrity of the container is compromised or it is unsuitable for cargo. flooring de-laminations resulting from routine cargo loading and unloading cycles.

<p>Non-Acceptable Damage</p>		<p>Defined as damage that must be repaired because:</p> <p>the International Convention for Safe Containers, 1972, as amended (CSC) is violated and container safety is affected;</p> <p>the Customs Convention is violated;</p> <p>there is a reduction in the internal height dimension by more than 70mm and/or the internal width / length dimension by more than 50mm;</p> <p>the container is unsuitable for cargo;</p> <p>cracks in welds are present unless otherwise stated; and</p> <p>corrosion, not due to paint failure, which causes loss of structural integrity.</p>
<p>Wear & Tear</p>		<p>This is defined as unavoidable change or deterioration of the condition of the container brought about by routine operational use and includes:</p> <p>general paint deterioration;</p> <p>deterioration of door gaskets and fittings;</p> <p>deterioration of door fixings arising from deterioration of doors;</p> <p>flooring de-laminations resulting from routine cargo loading and unloading cycles.</p>