STANDARDS UPDATE NOTICE (SUN)
ISSUED: November 10, 2025

STANDARD INFORMATION

Standard: UL 2703
Standard ID: Mounting Systems, Mounting Devices, Clamping/Retention Devices, and Ground Lugs for Use with Flat-Plate Photovoltaic Modules and Panels [UL 2703:2015 Ed.1+R:11Jun2025]
Previous Standard ID: Mounting Systems, Mounting Devices, Clamping/Retention Devices, and Ground Lugs for Use with Flat-Plate Photovoltaic Modules and Panels [UL 2703:2015 Ed.1+R:11Jul2024]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **June 11, 2027**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

Overview of Changes: Revisions to the Clamp Load Calculation Method. Specific details of new/revised requirements are found in table below.

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.

STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
		Additions to existing requirements are <u>underlined</u> and deletions are shown ~~lined out~~ below.
2	Info	**Glossary**
		New clause added;
	Info	CRITICAL BONDING FASTENER – A fastener (e.g., lock bolt, bolt, screw, nut, and washer) relied upon as part of the electrical bonding path and a required part of the assembly tested during the bonding and grounding tests.
		New clause added;
	Info	CRITICAL STRUCTURAL FASTENER – A fastener (e.g., lock bolt, bolt, screw, nut, and washer) relied upon as part of the structural load path and a required part of the assembly tested during mechanical loading tests.
	Info	**CONSTRUCTION**
6	Info	**General**
6.2A		***New clause added;*** The manufacturer shall specify the critical properties of the critical structural fasteners and critical bonding fasteners. Such properties shall include but not be limited to, geometry, tolerances, surface coating/plating type and thickness, metal alloy, minimum yield, minimum tensile strength, and/or proof strength. The requirements shall be included in the installation manual in accordance with 26.1(c). Note: The fastener properties may be controlled through compliance with consensus standards developed by Standards Organizations such as the American Society for Testing and Materials (ASTM), American Society of Mechanical Engineers (ASME), Society of Automotive Engineers (SAE), International Organization for Standardization (ISO), Deutsch Industrie Norm (DIN), Japanese Industrial Standard (JIS) or Industrial Fasteners Institute (IFI). Informative Appendix D summarizes common imperial and metric fastener standards and specifications. A manufacturer's quality management system is an alternate path to control the critical properties of fasteners.

CLAUSE	VERDICT	COMMENT
6.5 6.5A 6.5B 6.5C 6.5D 6.5E 6.5F		The estimated separating load applied to each fastened joint within the system at the minimum design load rating or manufacturer's product rating can be estimated using free body diagrams or finite element analysis. For threaded fasteners, the clamp load developed in a joint when the associated fastener is tightened in the field shall be determined through one of two methods defined in 6.5B and 6.5D. For lock bolts, the clamp load developed in the joint when tightened shall be determined in accordance with 6.5D. See standard for details.
6.6 6.6A 6.6B 6.6C 6.6D		For threaded fasteners, the estimated average slip resistance can be determined using the estimated average clamp load defined in 6.5B and the static coefficient of friction between the joint mating surfaces in accordance with the following equation. For lock bolts, the estimated average slip resistance can be determined using the mean clamp load ($W_{mean\ tested}$) determined in accordance with 6.5D and the static coefficient of friction between the joint mating surfaces in accordance with the following equation: See standard for details.
	Info	**INSTRUCTIONS**
26	Info	**Installation, Assembly and Maintenance/Inspection Instructions**
26.1		Rack mounting systems and clamping devices shall be supplied with installation instructions. They shall include: a) Scope of evaluation (grounding/bonding, fire classification, and/or mechanical loading) and a list of all PV modules evaluated for each scope of evaluation (grounding/bonding, fire classification, and/or mechanical load rating), and the statement "As specified in UL 61730-1 5.2.3DV, PV modules are considered to be in compliance with the mechanical loading and bonding and grounding requirements of UL 61730-1 when mounted, bonded and grounded in the manner specified by either the PV module mounting instructions, or the mounting system manufacturer's instructions when the mounting, bonding, and grounding means have been evaluated with the PV module to UL 2703" or the statement "To be used only in combination with modules that include this specific rack system in the module manufacturer's installation manual"; b) Direction on allowable spans and cantilevers; c) Details on fasteners (bolts, screws, nuts, and washers): 1) For critical structural and bonding fasteners not shipped with the unit, the critical fastener properties shall be specified along with an illustration, including but not limited to markings, cleanliness, geometry, tolerances, surface coating/plating type and thickness, metal alloy, and minimum yield and/or minimum tensile strength and/or proof strength; or 2) For critical structural and bonding fasteners provided with the unit, the statement "fasteners shall be clean and free of damage or signs of corrosion during installation", or equivalent.

CLAUSE	VERDICT	COMMENT
		d) Assembly method details required to achieve the desired clamp load, such as torque, tightening sequence, and/or tooling requirements in critical structural and bonding fasteners e) A representative diagram of the rack mounting system; and f) Description, illustration, and part number to clearly identify each component of the rack mounting system. Exception: When instructions furnished with a rack mounting system specify hardware that is commonly available commercially, the manufacturer shall not be required to provide the hardware with the unit, nor show an illustration of such hardware.