

STANDARD INFORMATION

Standard: UL 61730-2

Standard ID: Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements for Testing [UL 61730-2:2022 Ed.2+R:25Apr2023]

Previous Standard ID: Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements for Testing [UL 61730-2:2022 Ed.2]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **April 25, 2025**

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 Reports not updated to this version by the effective date above will be withdrawn.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: New Fire Type Additions in Fire Type Testing. Specific details of new/revise 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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined out below.</i>
10	Info	Test procedures
10.17	Info	Fire test MST 23
		<i>New clause added;</i>
		A Type 41 module meets the following requirements:
10.17DV.4.5.6		a) Construction: Glass superstrate with a thickness of $2,67 \pm 0,76$ mm ($0,105 \pm 0,030$ in); a polymeric encapsulant between the superstrate and cells with a pre-lamination thickness of $0,5 \pm 0,3$ mm ($0,02 \pm 0,012$ in); and a polymeric encapsulant between the cells and substrate with a pre-lamination thickness of $0,5 \pm 0,3$ mm ($0,02 \pm 0,012$ in), and a glass substrate with a thickness $2,67 \pm 0,76$ mm ($0,105 \pm 0,030$ in); and metallic framing protecting the edge of the laminate. b) Spread of Flame Test on Top Surface: The test shall be conducted using the procedure given in Section DVB.2. For Type 41, the allowable spread of flame is 3,96 m (13 feet) or less in 4 minutes. c) Burning Brand Test on Top Surface: The test shall be conducted using the procedure given in Section DVB.3 using a C Brand. For Type 41, passing results using a C Brand shall be demonstrated.
		<i>New clause added;</i>
		A Type 42, 43, 44 and 45 module meet the following requirements:
10.17DV.4.5.7		a) Construction: Glass superstrate with a thickness of $2,67 \pm 0,76$ mm ($0,105 \pm 0,030$ in); a polymeric encapsulant between the superstrate and cells with a pre-lamination thickness of $0,5 \pm 0,3$ mm ($0,02 \pm 0,012$ in); and a polymeric encapsulant between the cells and substrate with a pre-lamination thickness of $0,5 \pm 0,3$ mm ($0,02 \pm 0,012$ in), and a glass substrate with a thickness $2,67 \pm 0,76$ mm ($0,105 \pm 0,030$ in); and polymeric framing protecting the edge of the laminate. b) Spread of Flame Test on Top Surface: The test shall be conducted using the procedure given in Section DVB.2. For Type 42 and 45, the allowable spread of flame of 1,82 m (6 feet) or less in 10 minutes. For Type 43, the allowable spread of flame is 3,96 m (13 feet) or less in 4 minutes. For Type 44, the allowable spread of flame is 2,4 m (8 feet) or less in 10 minutes. c) Burning Brand Test on Top Surface: The test shall be conducted using the procedure given in Section DVB.3. For Types 42, 43, and 44, passing results using a C Brand shall be demonstrated. For Types 45, passing results using a A Brand shall be demonstrated.



CLAUSE	VERDICT	COMMENT
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New clause added;

A Type 46, 47, 48 and 49 module meet the following requirements:

10.17DV.4.5.8

- a) Construction: Glass superstrate with a thickness of $1,6 \pm 0,3$ mm ($0,06 \pm 0,012$ in); a polymeric encapsulant between the superstrate and cells with a pre-lamination thickness of $0,5 \pm 0,3$ mm ($0,02 \pm 0,012$ in); and a polymeric encapsulant between the cells and substrate with a pre-lamination thickness of $0,5 \pm 0,3$ mm ($0,02 \pm 0,012$ in); and a glass substrate with a thickness $1,6 \pm 0,3$ mm ($0,06 \pm 0,012$ in); and polymeric framing protecting the edge of the laminate.
- b) Spread of Flame Test on Top Surface: The test shall be conducted using the procedure given in Section DVB.2. For Type 46 and 49, the allowable spread of flame of 1,82 m (6 feet) or less in 10 minutes. For Type 47, the allowable spread of flame is 3,96 m (13 feet) or less in 4 minutes. For Type 48, the allowable spread of flame is 2,4 m (8 feet) or less in 10 minutes.
- c) Burning Brand Test on Top Surface: The test shall be conducted using the procedure given in Section DVB.3. For Types 46, 47 and 48, passing results using a C Brand shall be demonstrated. For Types 49, passing results using a A Brand shall be demonstrated.

Construction and fire performance for PV module types

Note: Only new portions of the table are shown.

Table
10.17DV.4.6.1

Type	Superstrate	Encapsulant (Super/Cell)	Encapsulant (Cell/Sub)	Substrate	Frame	Fire Performance	
	Material/ Thickness	Material/ Thickness	Material/ Thickness	Material/ Thickness	Material	Spread of Flame	Burning Brand
41	Glass / 2,67 ± 0,76 mm (0,105 ± 0,030 in)	Polymer / 0,5 ± 0,3 mm (0,02 ± 0,012 in)	Polymer / 0,5 ± 0,3 mm (0,02 ± 0,012 in)	Glass / 2,67 ± 0,76 mm (0,105 ± 0,030 in)	Metallic	3,96 m (13 feet) or less in 4 minutes	C Brand
42	Glass / 2,67 ± 0,76 mm (0,105 ± 0,030 in)	Polymer / 0,5 ± 0,3 mm (0,02 ± 0,012 in)	Polymer / 0,5 ± 0,3 mm (0,02 ± 0,012 in)	Glass / 2,67 ± 0,76 mm (0,105 ± 0,030 in)	Polymeric	1,82 m (6 feet) or less in 10 minutes	C Brand
43						3,96 m (13 feet) or less in 4 minutes	
44						2,4 m (8 feet) or less in 10 minutes	
45						1,82 m (6 feet) or less in 10 minutes	
46	Glass / 1,6 ± 0,3 mm (0,06 ± 0,012 in)	Polymer / 0,5 ± 0,3 mm (0,02 ± 0,012 in)	Polymer / 0,5 ± 0,3 mm (0,02 ± 0,012 in)	Glass / 1,6 ± 0,3 mm (0,06 ± 0,012 in)	Polymeric	1,82 m (6 feet) or less in 10 minutes	C Brand
47						3,96 m (13 feet) or less in 4 minutes	
48						2,4 m (8 feet) or less in 10 minutes	
49						1,82 m (6 feet) or less in 10 minutes	