

CTL DECISION SHEET

Standard: IEC 60664-1/1992 IEC 60335-1/2001 IEC 61010-1/2002 IEC 61058-1/2000 IEC 61008-1/2002 IEC 60947-1/2004 IEC 60598-1/2003 IEC 60065/2005 IEC 60950-1/2001	Sub clause: <p style="text-align: center;">See Table below</p>	DSH N°: 590 Page: 1(1)
Subject: Rule for creepage across grooves and similar surface discontinuities	Key words: <ul style="list-style-type: none"> - Creepage - Grooves - Conducting path - Shortest distance - Through air 	Decision approved by the CTL during its 43rd meeting in Johannesburg
<p>Question: As can be seen from examples 2 and 6 of IEC 60664-1 sub clause 4.2 corners with angles greater or equal than 90 degrees are not bridged. IEC 60664-1 does not contain specific information at which angle less than 90 degrees bridging shall be applied. Some of the above mentioned standards specify that bridging shall be applied for angles less than 80 degrees. Can this 80 degree rule be applied in general for all standards?</p> <p style="margin-top: 100px;">Decision: Yes. The 80 degree rule shall be applied in general for all standards.</p>		

Information which standards do already contain the 80 degree rule

Standard	Clause/ Annex	Product	80-Degree Rule Included
IEC60664-1: 1992	cl. 4.2	Horizontal Standard	No
IEC60335-1: 1991	Annex E	Household Appliances	Yes
IEC60335-1: 2001	Cl. 29	Household Appliances	No (Note 1)
IEC60730-1: 1999	Annex B	Automatic Controls	Yes
IEC60950: 1999	Annex F	IT Equipment	Yes
IEC60950-1: 2001	Annex F	IT Equipment	Yes
IEC60065: 2005	Annex E	Consumer Electronic Eqpt.	Yes
IEC61010-1: 2002	Annex C	Laboratory Measuring Eqpt.	No
IEC60601-1: 1988	Notes to Figs 39-47	Medical Eqpt.	Yes
IEC61558-1: 1988	Annex A	Power Transformers	Yes
IEC61058-1: 2000	Annex A	Switches	No
IEC60598-1: 2003	-	Luminaires	- (Note 2)
IEC60745-1: 2001	Annex A	Power Tools	Yes
IEC61008-1: 2002	Annex B	RCCBs	No (Note 3)
IEC60947-1: 2004	Annex G	LV Switch Gear	No

Notes

1. IEC60335-1 refers directly to IEC60664-1.
2. The luminaire standard gives no guidance on the rules for identifying creepage paths, referring to IEC 60664-1 only for the treatment of pollution degree.
3. This Standard includes the condition that grooves having a depth less than 1mm should be neglected (i.e. the creepage path 'jumps' the groove).