



How to Choose the Right Type of IR Window for Your Application

The materials available for infrared window optics are diverse and have a wide variety of transmission rates and mechanical strengths. It is advisable that when considering the use of IR windows, you seek advice from IR window manufacturers and IR lens material suppliers before deciding the materials and window styles best suit your application.

There are a number of sources from UL, IEEE, & NEMA that can be referenced to give the user guidance on the issues relating to installation and the use of IR windows. Listed below are just a few:

UL50V:

The UL standard that applies specifically to infrared windows.

<http://ulstandardsinfonet.ul.com/tocs/tocs.asp?doc=o&fn=o0050v.toc>

UL508 and 508A:

Are classifications for components used on electrical panels.

<http://ulstandardsinfonet.ul.com/scopes/scopes.asp?fn=0508.html>

<http://ulstandardsinfonet.ul.com/scopes/0508a.html>

UL746C:

Is a standard requiring flammability and impact tests for polymeric materials used on electrical equipment.

<http://ulstandardsinonet.ul.com/scopes/scopesnew.asp?fn=0746C.html>

IEEE C37.20.2 Section a.3.6:

Is the impact and load requirement for all viewing panes installed on medium and high-voltage switchgear (above 1kV).

<http://standards.ieee.org/reading/ieee/interp/C37.20Series.html>

http://standards.ieee.org/reading/ieee/std_public/new_desc/switchgear/C37.20.7-2001.html

Ingress Protection Standards:

Certify that an enclosure is capable of sealing out various levels of environmental contaminants. IP65 and NEMA 4 are equivalent standards indicating protection against dust and water ingress.

http://www.engineeringtoolbox.com/ip-ingress-protection-d_452.html

<http://www.nema.org/prod/be/enclosures/>