

Inspection and Maintenance Instructions for Photoluminescent Emergency Visibility (primary systems)

1. Check that all HTC products installed have the following test certification with the relevant Pass Criteria (PC):

a. Slip Resistance (*applies to products which include anti-slip material*)

UL 410 Standard for Slip Resistance for Floor Surface Materials, PC – Pass, or alternatively, AS 4586-2013, Slip Resistance Classification of New Pedestrian Surface Materials, PC - Classification: P5, or AS/NZS 4586-2004, Slip Resistance Classification of New Pedestrian Surface Materials. PC – Dry slip resistance classification F, wet slip resistance classification V, slip resistance assessment group R12.

b. UV Resistance

ASTM G155-04 Cycle 1 1000hrs, Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Nonmetallic Materials.
PC – Loss in luminance after exposure < 10%

c. Salt Spray Resistance

ASTM B117-97 500hrs, Standard Practice for Operating Salt Spray (Fog) Apparatus.
PC – Slight corrosion build up along scribes, no blistering or filiform growth along scribes.

d. Washability

ASTM D4828-94(2003), Standard Test Methods for Practical Washability of Organic Coatings.
PC – crayon, pen, 3M soil: all rating 10, being complete removal of soilant.

e. Rate of Burning

ASTM D635-03, Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position.
PC – Time of burn 0 seconds, does not burn.

f. Surface Flammability

ASTM E162-02, Standard Test Method for Surface Flammability of Materials Using a Radiant Heat Energy Source.
PC – Flame spread index 7.6, ignites with difficulty

g. Toxicity

Bombardier Toxic Gas Generation Test SMP800-C.
PC - Pass

h. Radioactivity

ASTM D3648-2004, Standard Practices for the Measurement of Radioactivity.
PC – Pass

i. Luminance

UL 1994 Standard for Luminous Egress Path Marking Systems.
PC – Pass, AND

All step edge products, handrail markings and perimeter demarcation products shall be independently tested in accordance with UL 1994 except that the observation test is replaced by

luminance readings at 60, 90, 120 and 180 minutes after charging ceases.

PC - 60 minutes after charging ceases, a minimum of 15 mcd/m²; and

90 minutes after charging ceases, a minimum of 10 mcd/m²; and

120 minutes after charging ceases, a minimum of 8 mcd/m²; and

180 minutes after charging ceases, a minimum of 5 mcd/m²

j. High Temperature Curing

Independently tested by placing 3 samples in an oven at 150°C for 20 minutes and then examining the samples after removing from the oven.

PC – the samples shall have no shrinkage, delamination, distortion, or yellowing.

2. Complete the following inspections to ensure ongoing compliance with relevant building or fire code.

Action	Complete
Installation checked against original plans (where available).	
There has been no change in the configuration of the building which renders the marked escape routes unusable.	
All products are still configured as at installation and there is no material damage to any of these products.	
All products are clean from general dust build up and any other specific obscuring deposits.	
All products are clearly visible and have not been covered up by carpet or other materials.	
All products mark a clear path and have not been obstructed by physical hazards such as trolleys, machinery, partitions, etc.	
All lights checked that the positions have not altered from design.	
All lights are in working order and clean.	
All automated lighting control systems are operational as per design.	

The above checks should be carried out regularly and at least once every 12 months to ensure reliability of the system in case of fire or other emergency.

Any repairs or replacements required should be carried out immediately. A log of all inspections including results and any corrective measures taken should be recorded and kept on the premises for inspection by the building management and fire department. The log should contain the inspection dates and printed name and signature of the person performing the inspection.

In situations where signs and markings are likely to become dirty, it is recommended that frequent checks and cleaning are done.