

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Cable Ladders**

with type designation(s)
Topaz (Z) / Sapphire (P) / Emerald (E)

Issued to

Legrand Electric Limited
Birmingham, United Kingdom

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Material Post galvanized / Stainless steel
Suitable for open deck Yes

Issued at **Høvik** on **2017-12-21**

This Certificate is valid until **2022-12-20**.

DNV GL local station:

for **DNV GL**

Approval Engineer: **Georgy Abramenko**

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Andreas Kristoffersen
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Product description

Cable ladders types Topaz (Z), Sapphire (P), Emerald (E)

Widths [mm] : 150, 300, 450, 600, 750, 900
Standard length [m]: 3, 6

Classification according to IEC 61537:

6.1 Material:	Metallic
6.2 Flame propagation:	Non-flame propagating system
6.3 Electrical continuity:	With electrical continuity characteristics
6.4 Electrical conductivity	Electrically conductive
6.5 Resistance against corrosion:	Class 5 Class 6 Class 8 Class 9B and 9D
6.6 Temperature:	Min temperature: -20°C Maximum temperature: 90°C
6.7 Perforation in the base area:	N/A
6.8 Free base area:	Classification Y
6.9 Impact resistance	Up to 50J

Application/Limitation

To be installed in accordance with the manufacturer's instructions and DNV GL rules.
Suitable for open deck.

Type Approval documentation

Tests carried out

Tested according to IEC 61537 (2006-10-11)

Marking of product

Manufacturer – Type designation

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE