

## **Gandalf**

### **Instructions for mounting and use**

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### **Changing the neon tube**

CHANGING THE NEON TUBE MUST BE DONE WITH THE POWER SWITCHED OFF. IF POWER POINTS ARE CONNECTED MAKE SURE THE LIGHT SWITCH IS TURNED "OFF".

### **Mounting and "removing" the reflecting slats:**

If the luminaire is equipped with reflecting slats, these need to be "removed" first. They are attached to the lamp by means of brackets.

1. Next to the container holding the neon tube you find a bracket and a small "wire" attaching the reflecting slats to the lamp.
2. Push the end of the wire into the holes on the crosscuts of the reflecting slats (both sides, see illustration 4). The reflecting slats are now prevented from falling down and will be held by the wires.
3. Gently push both sides of the reflecting slats over the brackets, see illustration 5. You will hear a clear "click".
4. Remove the reflecting slats by gently pulling both sides down from the brackets.

### **Changing the neon tube:**

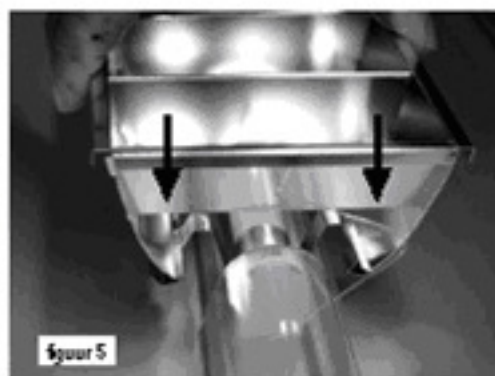
Gandalf luminaires are provided with neon tubes type "T5". On one of the sides of the neon tube you will find the capacity (wattage) and the colour number.

- a. Remove the caps at the ends of the neon tube (and the foil behind them) by slightly pressing them together, see illustration 6.
- b. Turn the (used) neon tube a quarter turn or three quarter turn, until it "falls" from the holders.
- c. Place the new neon tube between the holders and give it a quarter turn until it audibly clicks into the right position.
- d. Return the caps to the ends of the neon tube. Then slide the coloured foil behind the caps.

### **Maintenance and cleaning**

Never use abrasives or scourers when cleaning Gandalf luminaires.

Anodised designs can be cleaned with a damp cloth and, if necessary, nonabrasive cleaning fluid.



## **Instructions for mounting the Gandalf luminaire**

Pendant and surface-mounted design

### **Standard accessories of Gandalf luminaires are:**

- the luminaire, including caps covering the ends of the neon tube
- neon tube
- two pendant wires (for the pendant version)
- two cylinders, brackets and wire clamps + screws (for the pendant version)
- two screws + plugs (for the surface-mounted version)
- besides these instructions for mounting, instructions for use (see overleaf)

### **Hanging up / mounting the luminaire**

#### **Hanging up the pendant:**

Make sure before hanging up the pendant that the points used for suspension are adequate and/or properly attached to the ceiling or surface. Before suspending the luminaire determine the required distance between the pendant wires. This must not exceed the length of the luminaire and not be shorter than 1/3 of its length.

- a. For placing the neon tube see the instructions for use: "changing the neon tube".
- b. Put the pendant wires through the cylinders as shown in illustration 1.
- c. Attach the ends of the pendant wires to the ceiling. To ensure a proper and adequate fastening of the pendant wires use the wire clamps + screws supplied. The required height of the luminaire is determined by the length of the pendant wires (underside luminaire is approx. 100 mm lower than the underside of the cylinder).
- d. Place the luminaire with the underside on a stable surface.
- e. Place the bracket over the luminaire in the appropriate grooves, see illustration 2. Make sure the brackets do not scratch the aluminium. Also ensure that the bracket matches the groove on both sides of the luminaire. If necessary, gently press the bracket before placing it.
- f. Slide the brackets through the grooves to the (symmetrical) spot required, at a distance from each other approximately matching the distance between the pendant wires.
- g. Pick up the luminaire in a horizontal position and let a second person place the brackets into the groove of the cylinders, see illustration 3.
- h. Adjust the pendant wires in a vertical position by sliding the brackets through the groove. This will be easier when slightly lifting the luminaire.
- i. Place the luminaire in a horizontal crosswise position by sliding the brackets through the groove of the cylinders.

#### **Installing the surface-mounted luminaire:**

Make sure that the surface for attaching the luminaire is adequate and suitable.

- a. Place the luminaire with the top on a stable surface.
- b. Remove the PET caps at the ends of the luminaire by gently "pressing them together". The holes through which the luminaire is to be attached to the surface are now visible.
- c. To fasten the luminaire drill holes in the appropriate places, and at the right distance from each other (on a stone/concrete surface with a diameter of 8 mm for the plug supplied, on a wooden surface with a diameter of maximum 4 mm).
- d. Fasten the luminaire with the screws supplied. Make sure you have someone to assist you.
- e. For placing the neon tube see the instructions for use: "changing the neon tube".

### **Connecting the luminaire**

ALWAYS USE AN EARTHED SOCKET (220V-240V) WHEN CONNECTING THE LUMINAIRE AND MAKE SURE THE POWER IS TURNED OFF.

IF POWER POINTS ARE CONNECTED MAKE SURE THE LIGHT SWITCH IS TURNED OFF.

#### **Luminaire with a plug attached to the electricity cable:**

Connect the luminaire by plugging the cable into the socket. Make sure the cable is not too taut, but is "loosely" suspended. Switch on the light switch.

#### **Luminaire without plug attached to the electricity cable:**

First connect the earthed wire (green/yellow), then the neutral wire (blue), and subsequently the load wire (brown) of the electricity cable to the matching coloured wires within the socket. If the power points are connected the load wire (brown) must be connected to the black wire of the socket. When connecting these wires use a certified connector.

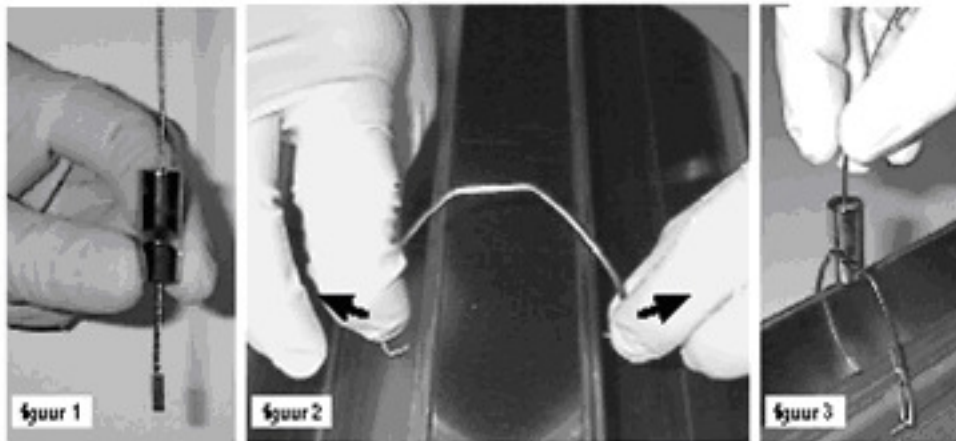
Make sure the connection point of the electricity cable to the socket is relieved from possible strain by using a strain release pushing. Switch on the light switch. Because the neon tube needs to “warm up” every time it is switched on it will take a few minutes before an “optimal light output” is reached.

#### **Guarantee, repairs and service**

All Gandalf luminaires have a term of guarantee of 1 year following the delivery date.

Guarantee is only given if the guidelines included in these instructions are strictly adhered to. If the purchaser does repairs personally, all guarantee ceases.

**Gandalf has been designed and produced by Robin Hood Productions, Joris van den Berghweg 103 – Hal B – 0.06, 1067 HP Amsterdam, the Netherlands, + 31 (0)20 6 20 83 47(phone), [www.robinhoodprodukties.nl](http://www.robinhoodprodukties.nl). Design and name of Gandalf luminaires are protected by law.**



## **Gandalf**

### **Instructions for mounting and suggestions for non-standard segments.**

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1. Determining the number of pendants for Gandalf segments
2. Hanging up Gandalf segments (varying lengths)
3. Dimming and daylight-dependent regulation
4. Connecting electricity cable (220V)
5. (Electrical) linking of Gandalf segments

#### **1. Determining the number of pendants for Gandalf segments**

For hanging up Gandalf luminaires and/or segments longer than the standard length we advise you to use one pendant per 150 cm luminaire or segment (length of segment in cm divided by 150, round off, +1). The pendants need to be divided equally along the luminaire or segment. The minimum number of pendants is determined as follows:

Example 1, length of segment 290 cm.

Number of pendants:

290 divided by 150 = 1,9

round off = 2

+1 = 3 pendants

Division of pendants:

$3 \times 2 = 6$

$290/6 =$  rounded off 48 cm

first pendant at a distance of 48 cm from the end of the luminaire/segment

remaining pendants evenly placed at a distance of  $(2 \times 48 =)$  96 cm.

Example 2, length of segment 630 cm.

Number of pendants:

630 divided by 150 = 4,2

round off = 4

+1 = 5 pendants

Division of pendants:

$5 \times 2 = 10$

$630/10 = 63$  cm

first pendant at a distance of 63 cm from the end of the luminaire/segment

remaining pendants evenly placed at a distance of  $(2 \times 63 =)$  126 cm.

Based on these calculations sufficient pendants are supplied.

#### **2. Hanging up Gandalf segments (varying lengths)**

The use of pendants for hanging up (larger) Gandalf segments can be a bit tricky. We advise you to work according to the following instructions to get an optimal, fast and "easily reached" result:

1. Determine the number of pendants and the distance between the pendants.
2. Provide the ceiling with the required number of fastening points, in the right position and at the right distance.
3. Prepare all pendants by:
  - pulling the pendant wire through the cylinders and the white connector
  - placing the pendant brackets in the right position on the Gandalf segment
4. Attach the two outermost pendant wires to the fastening points and determine the required length. Fasten the wires to the connectors.
5. Attach the Gandalf segment to the pendant wires with the outermost pendant brackets on the segment (work with two persons).

6. Attach the remaining pendant wires first to the fastening points, then pull them tight and attach them to the pendant brackets.
7. If necessary, adjust the height of the Gandalf segment for each pendant.
8. Pull all wires tight until each pendant carries approximately the same weight.

### **3. Dimming and daylight-dependent regulation**

For Gandalf designs with a dimmer switch and/or daylight-dependent regulation please note the following:

Neon tubes must have had a maximum light output for at least 100 hours, before dimming them or regulating them with the daylight sensor. Daylight sensors for daylight-dependent regulation are therefore provided with a “darkening” sticker. After a minimum of 100 burning hours the sticker may be removed and the daylight sensor be set. Dimming the neon tubes or setting the daylight sensors any sooner will have a (very) negative effect on the number of burning hours (the life span can be reduced with 10%!!).

Also note that neon tubes used for the above-mentioned designs have to be placed in the same direction, with the lettering “pointing” into one direction.

See chapter 5 for (electrical) linking of luminaires or segments with dimmer switch and/or daylight-dependent regulation.

### **4. Connecting electricity cable (220V)**

For Gandalf designs without an electricity cable please note the following instructions (also see illustration 2):

- a. The earthed wire must be at least 2 cm longer than the other wires.
- b. The strain release pushing near the connector must be used at all times. The cable must be guided through and screwed down. If there is no “lid” and/or front mounted on the Gandalf luminaire and/or segment please follow these instructions:
  - 1 If present remove the front (two screws)
  - 2 Connect the electricity cable (if possible use a strain release pushing, TYPE “B”)
  - 3 Fasten the “lid” supplied by clicking (illustration 1)
  - 4 Mount the front
  - 5 If not yet done, fasten the electricity cable using a strain release pushing (TYPE “A”).

### **5. (Electrical) linking of Gandalf segments**

Linking segments:

Linking Gandalf segments can be done with specially supplied links (aluminium strips, 10 cm long, fitted with two holes, and screws). We advise you to place the segments a few millimetres or centimetres apart, otherwise the seam between the segments becomes annoyingly visible (this is caused by tolerated discrepancies in measurements of the basic profile of one hundredths mm).

Linking must be done as follows:

- 1 Segments to be linked must be adequately secured (pendants or ceiling).
- 2 Insert the link into one of the segments, push “inwards” as far as possible, see illustration 3.
- 3 Insert other side of the link into a second segment and adjust it until it is evenly divided into the segments.
- 4 Fasten the link to both segments with the screws, and simultaneously adjust the distance required between the segments.

Electrical linking:

If electrical linking of Gandalf segments is required, please follow the instructions in chapter 5. The means for electrical linking are supplied, if indicated when ordering Gandalf segments.

Electrical linking of luminaires/segments equipped with dimmer switch or daylight-dependent regulation:

Linking or connecting the electricity cable (0-10V) for the purpose of dimming and/or conducting the daylight sensor signal is not possible. If this is done nonetheless, the risk of power failure or signal failure under influence of the high-frequency tube wires is greatly increased. Therefore the

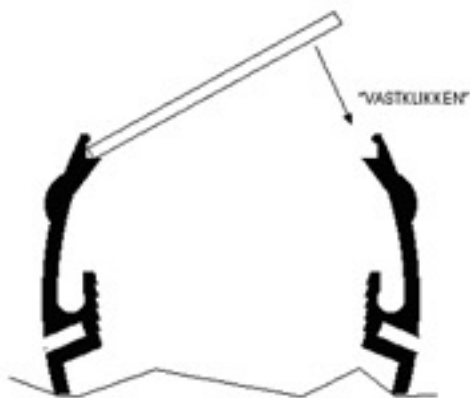
electricity cables must be removed individually from the luminaire/segment and reconnected elsewhere (against or behind the ceiling, in wall socket etc.).

### Guarantee, repairs and service

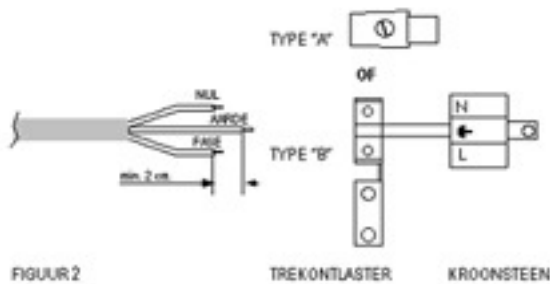
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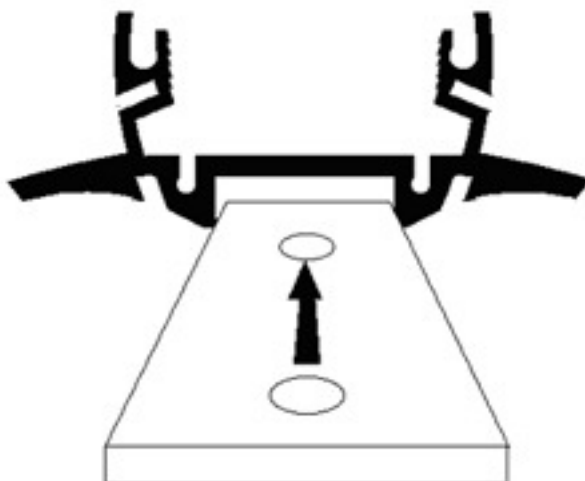
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FIGUUR 1



FIGUUR 2



FIGUUR 3