

# Bright Green Grid 30 Install & Handling Guide

## Components required



18 -20 AWG wire



Bright Green Grid 30



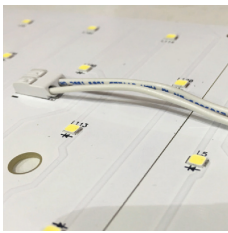
Power supply



Wire connectors



M4 screws



Interconnect cables

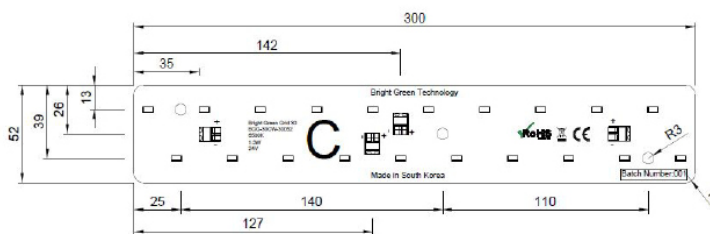
## Box constraints

Minimum box depth: 30mm

## Construction

Principle materials: FR4 PCB

Each panel has 4 x WAGO 2060 connectors to allow for electrical connections. It is possible to connect the panels together using any of the WAGO connectors on the board.



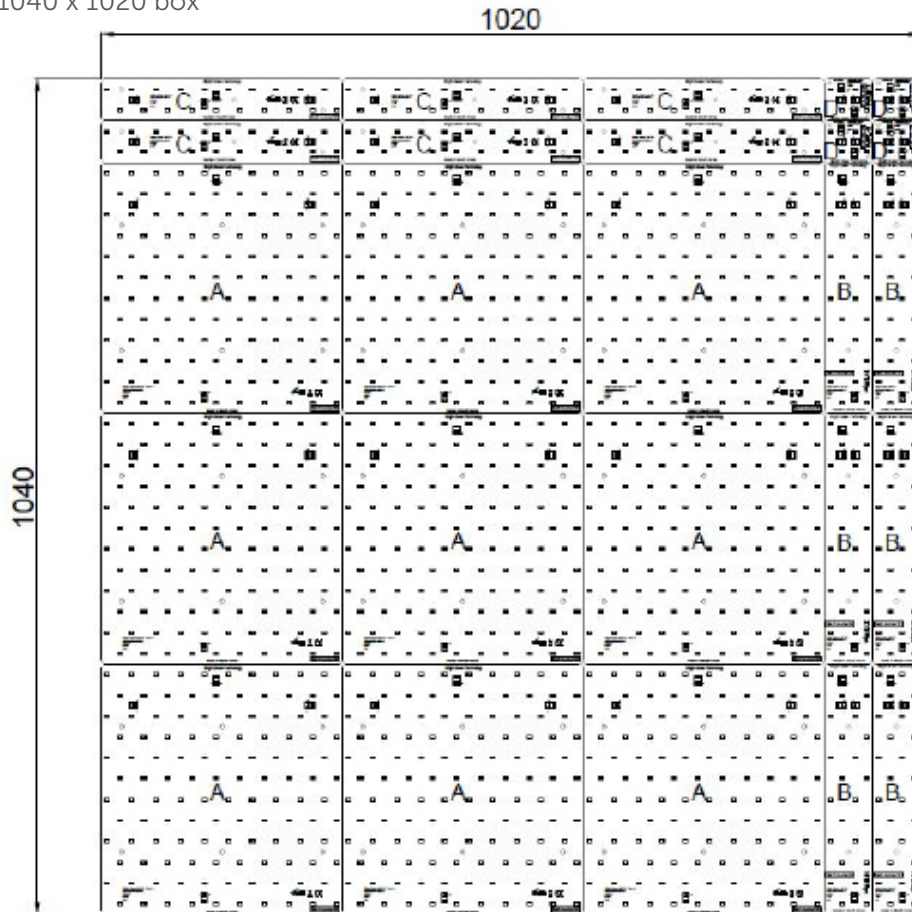
## Layout

1. Panels are to be set out according to provided layout drawings.
2. If drawings have not been provided, start by placing as many A Panels in the available space. The panels are designed to be butted up to the next panel. This ensures the LED pitch remains constant throughout the box ensuring an even illumination.
3. When steps 1 & 2 have been completed, start laying out Panel B. Panel B is used to fill in the remaining vertical section.
4. Panel C will be used to fill in the remaining horizontal section.
5. Panel D is used to fill in the top right hand corner of the box.

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## Layout (cont.)

Example of a 1040 x 1020 box



### Electrical

LED Power = 81.2W  
System Power = 86W  
Current = 0.37A

## Installation

Each panel is manufactured with a number of  $\varnothing$  6mm fixing holes. Once the panels have been laid out they can then be fixed to the back of the box using self-tapping screws and washers. Be careful not to overtighten the screw and cause damage to the panel.

## Cable Specification

Cable type	Value
Solid Cable	0.2-0.75 mm <sup>2</sup> / 24-18 AWG
Fine-stranded wires	0.2-0.75 mm <sup>2</sup> / 24-18 AWG
Strip length	6 -7 mm / 0.24- 0.28 in

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We recommend using Bright Green Interconnect Cables, if you choose not to use these then please see the cable specification required below:

## Connecting Grid 30 Panels using solid core cable

Strip the cable insulation back by 6-7mm

Push cable into connector

To release the cable lightly depress the lever on the connector and pull the cable out

## Connecting Grid 30 Panels using stranded cable

Strip the cable insulation back by 7mm

Lightly depress the lever connector with a pen or screwdriver

Insert cable and release lever

To release the cable lightly depress the lever on the connector and pull the cable out

## Power requirements

Our engineers will provide details of the power supplies needed based on the specific box size and depth.

## Notes & Handling

Store Grid 30 panels in a cool, dry place, make sure to protect from dust and heat

Take care when handling to avoid damaging electrical components

Only connect to a 24 volt power supply

Do not cut the Grid 30 panel or attempt to disassemble or modify the components in any way

Do not drop or bend the panel

Do not drill holes in the panel