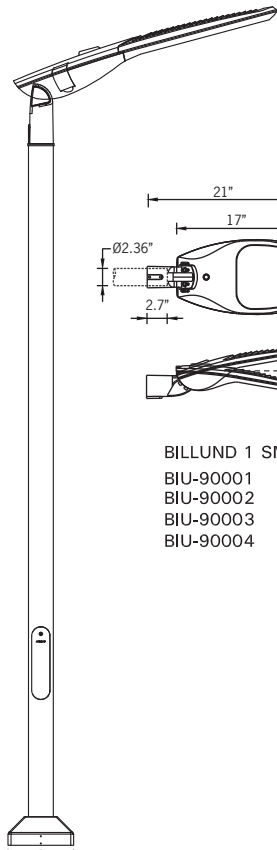


INSTALLATION AND SERVICE MANUAL

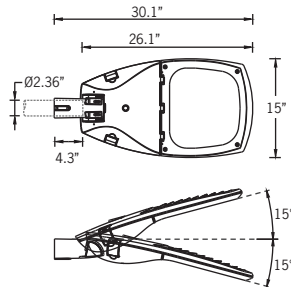
LIGMAN
NORTH AMERICA

For Installation of Billund 1,2,3 street and area lighting LED.
Model. BIU-90001-04, BIU-90011-15 and BIU-90021-25

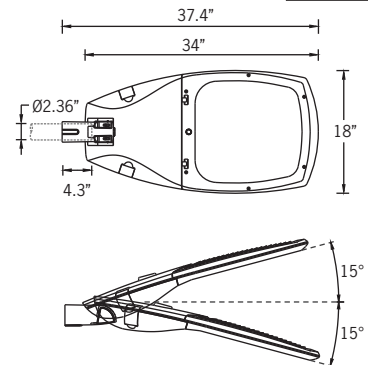
Product drawing (dimensions) CE IP66 IK09 CLASS I



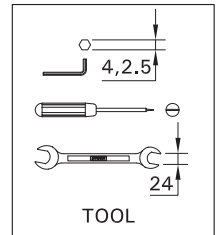
BILLUND 1 SMALL
BIU-90001
BIU-90002
BIU-90003
BIU-90004



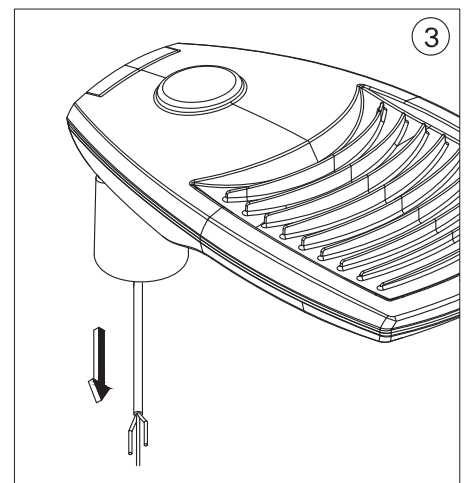
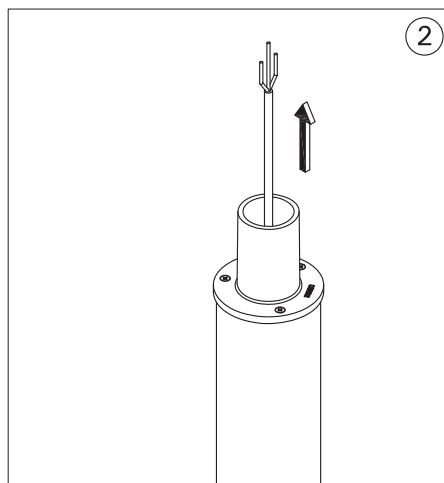
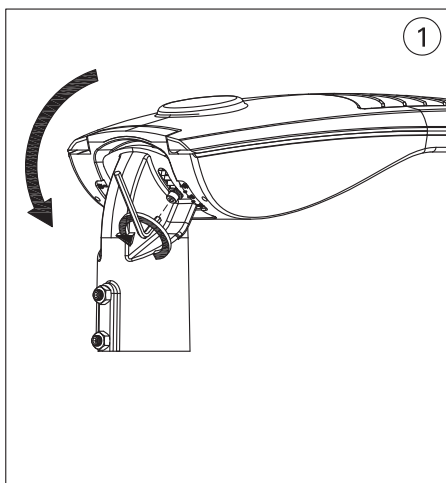
BILLUND 2 MEDIUM
BIU-90011
BIU-90012
BIU-90013
BIU-90014
BIU-90015



BILLUND 3 LARGE
BIU-90021
BIU-90022
BIU-90023
BIU-90024
BIU-90025



TOOL



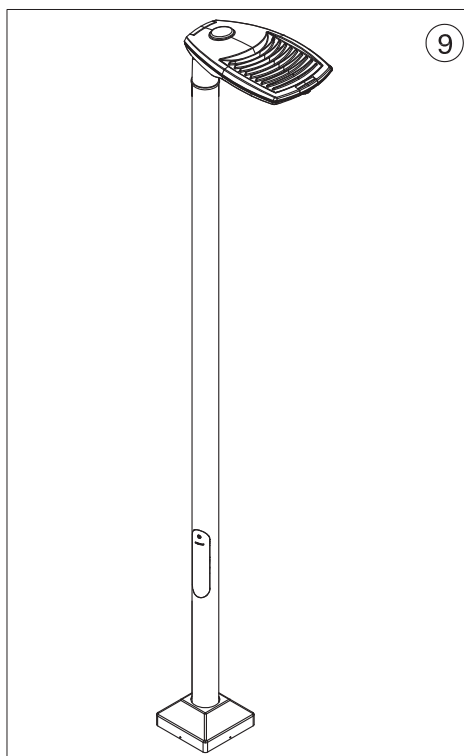
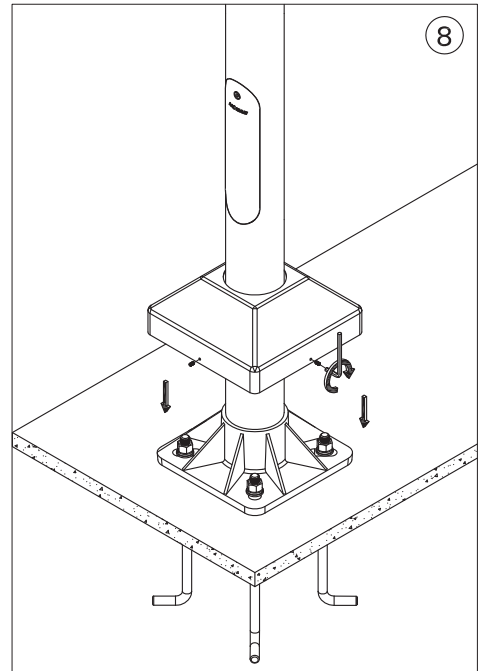
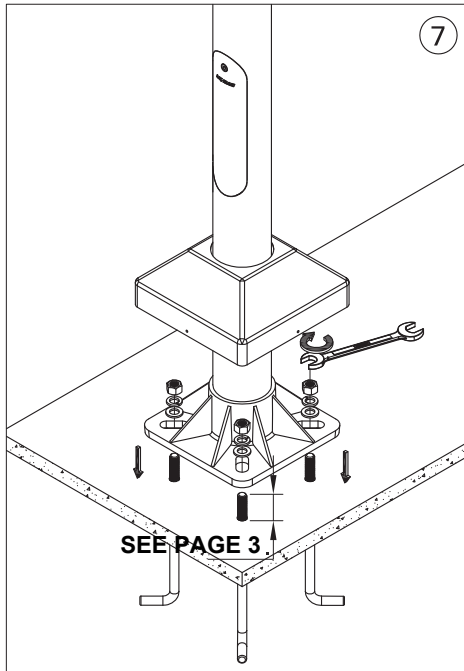
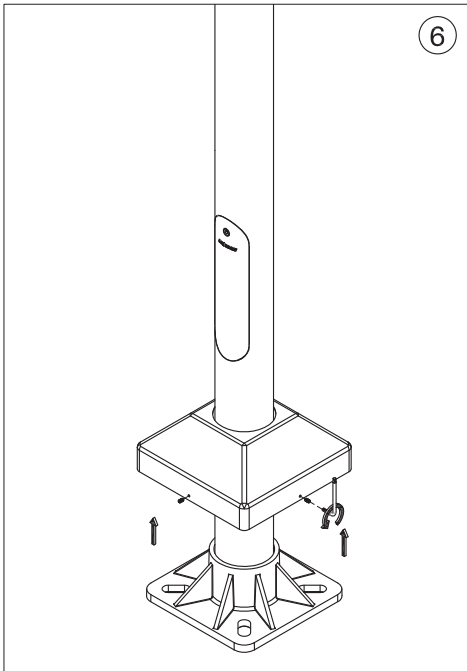
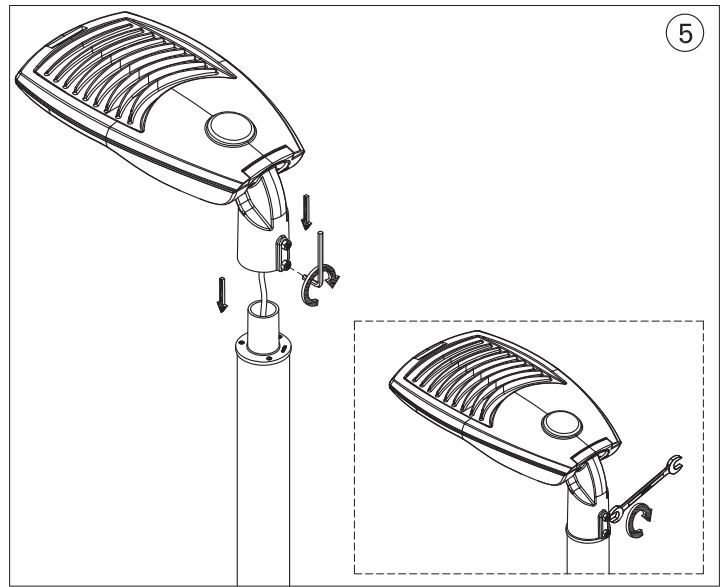
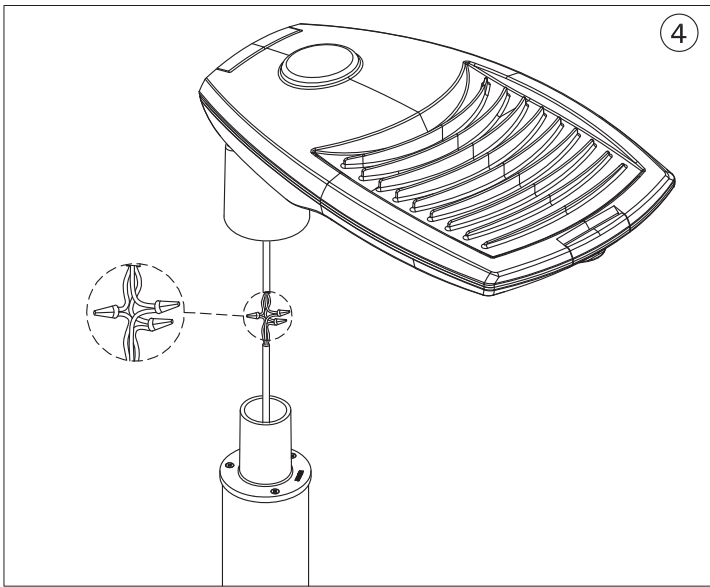
Notice to installer :

1.WIRING INSTRUCTIONS Warning : RISK OF FIRE AND ELECTRICAL SHOCK. : FIXTURE MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN ONLY>FIXTURE IS INTENDED FOR INSTALLATION IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, LOCAL AND FEDERAL CODE SPECIFICATIONS. DISCONNECT POWER BEFORE SERVICING.

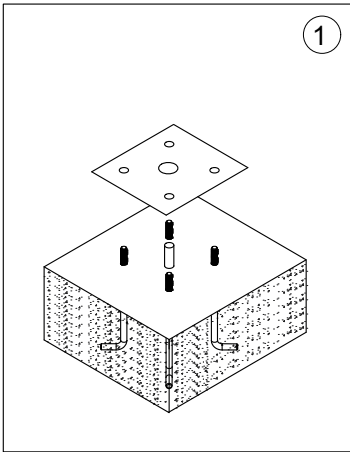
2.This fixture has a VOLTAGE SPECIFIC BALLAST,Check that the supply voltage is the same as the installed ballast voltage.

Ligman Lighting USA

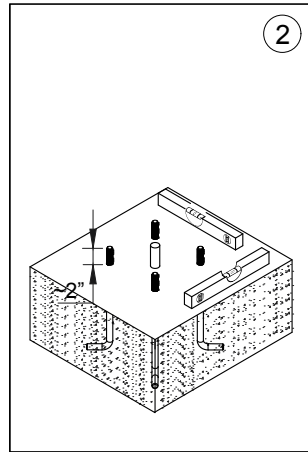
7144 NE Progress Court, Hillsboro
Oregon, 97124, USA
Tel : 503 645 0500 | Fax : 503 645 8100



USING LEVELING SHIMS



Use anchor bolt template to set anchor bolts into concrete as per civil engineering instructions.

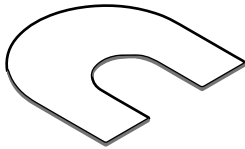


Ensure that the concrete is plumb using a level. Failing to do this will result in pole being uneven or tilted.

Ligman does not provide foundation details. A local engineer that is familiar with the site soil conditions should provide this information.

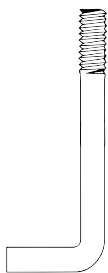
NOTE:

Ligman does not recommend using leveling bolts for pole installations.

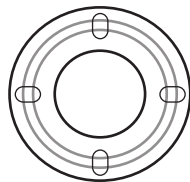


Leveling Shim Example

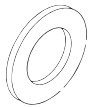
What's Included Per Pole



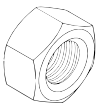
x 4



x 4



x 4



A single anchor bolt template is provided per pole size to be used for the poles on the project.

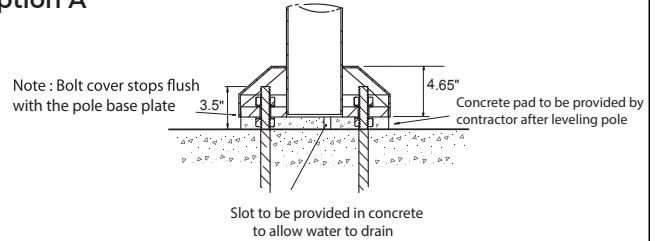
Anchor bolt template may be round or square dependant upon which pole is being used.

USING LEVELING BOLTS

SHOULD THE CONTRACTOR SELECT TO USE THE LEVELING BOLT METHOD, AN ADDITIONAL 4 BOLTS NEED TO BE PURCHASED

In rare instances where leveling bolts have to be used, it is important that a flush concrete surface is created to mount the pole base plate.
NOTE: When using leveling bolts, bolt projection should be 3.5"

Using Leveling Bolts Option A



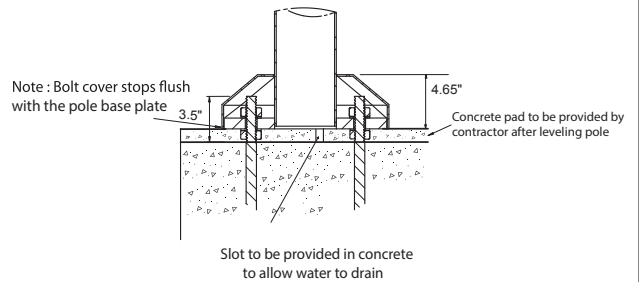
When using leveling bolts.

After establishing a level platform the space between the original concrete surface and the pole base should be filled with concrete and finished flush.

This provides a uniform load displacement pad for the forces created by wind and luminaire weight

Foundation and Design by Others

Using Leveling Bolts Option B



When using leveling bolts.

After establishing a level platform the space between the original concrete surface and the pole base should be filled with concrete and finished flush.

This provides a uniform load displacement pad for the forces created by wind and luminaire weight