

Client Manual

North American Variants

Grid install video



Joist install video



 NOTE

Animated videos available on YouTube: <https://youtu.be/3yaXMpCZN-0> <https://youtu.be/5Q8z9OoVc1o>



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IMPORTANT - Warning

Check the luminaire immediately upon receipt for any physical damage.

The manufacturer is not responsible for late reporting of any physical damage and replacement may be charged. Innerscene optionally provide a quick test power cord (KIT-QTPC-NA) to quickly test that all fixtures power on. Depending on local codes, this can normally be used at ground level without an electrician.

Install product in accordance with local and national electrical codes, using a qualified electrician.

Failure to comply with the installation instructions may result in serious injury or death.

Read all safety instructions included with the luminaire prior to installation.

This is an electronic device. Care must be taken during storage and handling. Store in a clean, cool and dry location. Electrostatic discharge (ESD) can harm this product. Avoid static discharge while handling the product. This product contains a temporary internal power source for time keeping, and must be installed within two calendar weeks of receipt. Delays in installation may result in additional reprogramming to the internal clock.

The manufacturer is not responsible for the structural integrity of the building to support the luminaire. Additional backing may be required.

Quick test power cord

A power cord may be optionally supplied with your shipment to facilitate the testing of your light fixtures. Test the fixtures at ground level prior to hard wiring into ceiling or walls. This power cord is normally packed in the Primary fixture box. **Warning! In some areas, homeowners can perform this test without a licensed electrician. Consult your local codes.**

Building power socket

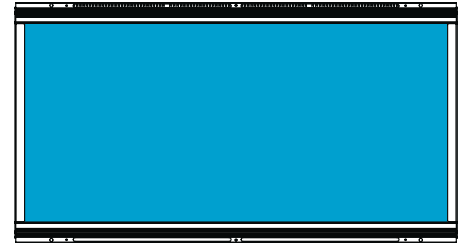


Quick test power cord



approximately 1m / 3' long

Innerscene light fixture



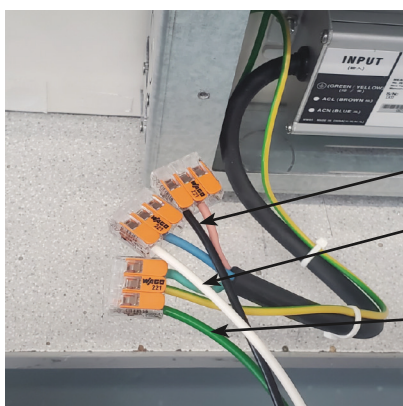
1) Open driver box access panel with Phillips PH2 screw driver



2) Remove 3x Wago wire clamps pre-attached to quick test power cord to expose copper conductors and set to one side.



3) Insert pigtail wires into Wago clamp on light fixture as shown below (3-way or 5-way connectors may be provided). Brown to Black. Blue to White. Green/Yellow to Green. Do not connect dimming wires (Grey & Purple).



Line/Hot/Black

Neutral/White

Ground/Green

4) Plug the power cord into a building mains power socket and confirm unit powers on and there is no visible damage from transit, do not remove protective wrap at this time. Some dimming and control features may be available whilst powered from a socket. **Warning- Electrical shock! Make sure to unplug from mains power socket before disconnecting lines at the test plug harness and A7 interface before moving to the next unit**



Brand	Dimmer	Control type	CCT Range ⁽⁶⁾		Min. Dim	Notes
			Min	Max		
Casambi	CBU-A2D	DALI Tunable White	3,300K	17,000K	0.4%	
Casambi	CBU-ASD	DALI Tunable White	3,300K	17,000K	0.4%	
Crestron	CLX-2DIMFLV8	0-10V (sink)	3,300K	17,000K	N/A	No dimming
Crestron	GLXP-DIMFLV8-LP	0-10V (sink)	3,300K	17,000K	N/A	No dimming
Crestron	CLX-2DIMFLV8-277	0-10V (sink)	3,300K	17,000K	N/A	No dimming
Crestron	GL-CAEN-2DIMFLV8	0-10V (sink)	3,300K	17,000K	N/A	No dimming
Crestron	DIN-4DIMFLV4	0-10V (sink)	3,300K	17,000K	N/A	No dimming
Crestron	CLXI-2DIMFLV8	0-10V (sink)	3,300K	17,000K	N/A	No dimming
Lutron	Homeworks + DALI	DALI Tunable White	3,300K	17,000K	0.1%	
Lutron	Athena + DALI	DALI Tunable White	3,300K	17,000K	0.1%	
Lutron	Homeworks + 0-10V	0-10V (sink)	3,300K	17,000K	N/A	No dimming
Lutron	Athena + 0-10V	0-10V (sink)	3,300K	17,000K	N/A	No dimming
Lutron	GRAFIK Eye QS DALI	DALI-1	N/A	N/A	0.1%	No colour change
Lutron	GRAFIK Eye + GRXTVI	0-10V (sink)	3,300K	17,000K	N/A	No dimming
Pharos	TPC + EXT	DMX512 ⁽⁵⁾	3,300K	17,000K	0.1%	
Pharos	TPC + EXT	DALI Tunable White	3,300K	17,000K	0.1%	
Sunricher	SR2300TRG4CCTWH	DALI Tunable White	3,300K	17,000K	0.1%	
Sunricher	SR2300TSCCTBL	DALI Tunable White	3,300K	17,000K	0.1%	
Sunricher	SR2300TSCCTWH	DALI Tunable White	3,300K	17,000K	0.1%	

Application Notes

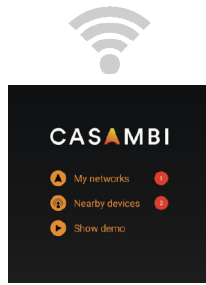
- 1) DALI Tunable White or DALI-1 dimmers require DALI Expanders. DALI Tunable White refers to DALI-2 DT8 Tc.
- 2) Array of fixtures (more than 1 fixture per zone/group) requires an Innerscene supplied/approved Wireless Router (and Ethernet switch with arrays greater than 4 fixtures) for synchronisation.
- 3) Low-end trim adjustment may be required to ensure all fixtures are evenly matched.
- 4) Dimming compatibility subject to change without notice.
- 5) DMX512 dimming requires DMX-DALI converter supplied by Innerscene Ltd.
- 6) Shown as actual delivered CCT Range. DALI Controller CCT range between 2700K and 6500K will interpolate to delivered CCT range.
- 7) DALI-1 controllers can only control brightness, not colour.
- 8) Innerscene interpolates DALI commands between 2,700K and 6,500K to 3,200K to 17,000K delivered.

Casambi wiring guide

Blue sky, Sunrise or Sunset, Moon and Circadian Scenes are pre-programmed at the factory. Mobile app synchronisation required at the time of installation and when building power is disconnected.



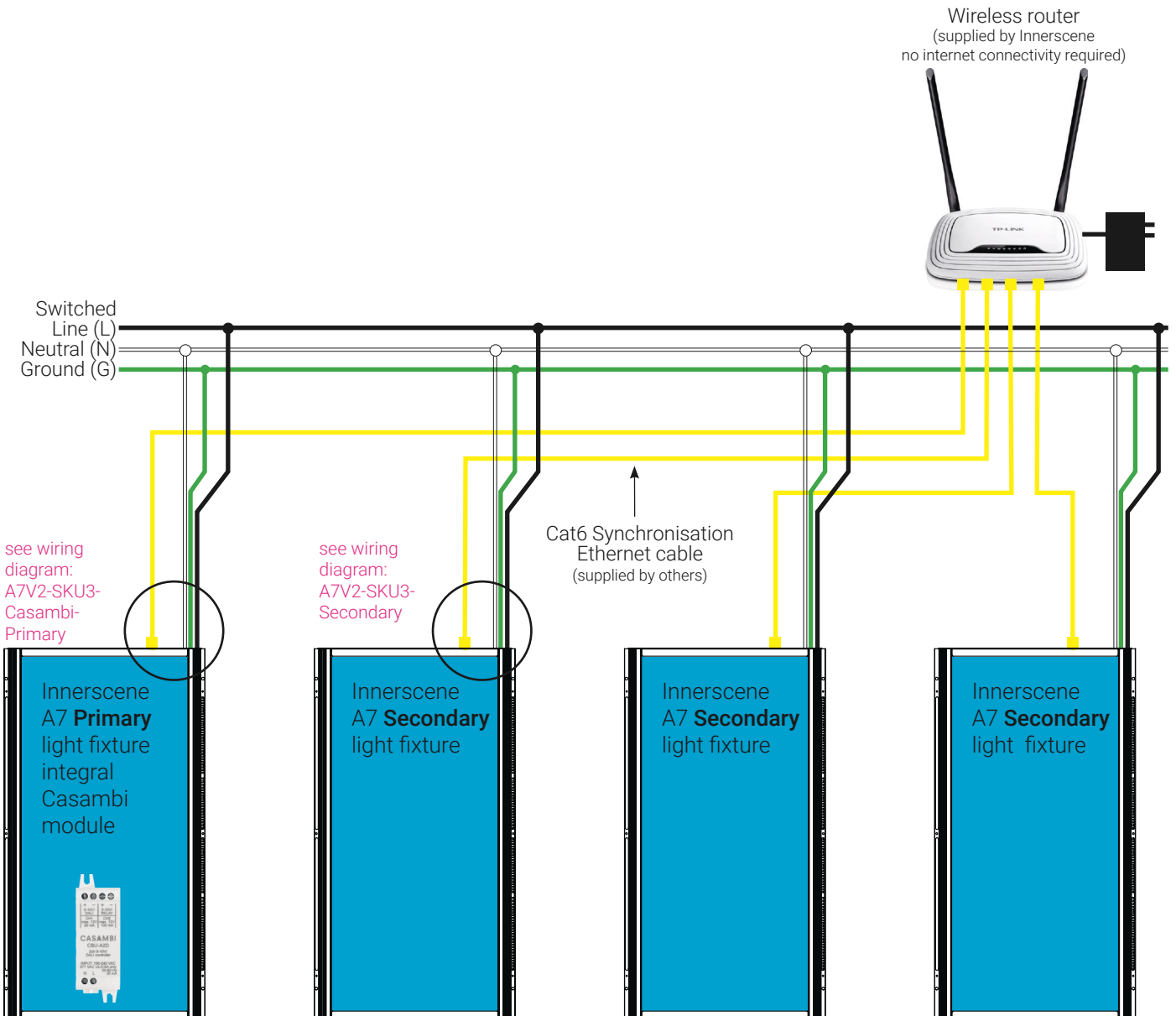
Casambi Xpress
Wall Mountable Controller
supplied as standard



Casambi App
on Phone or Tablet



Optional Motion
or Light sensor

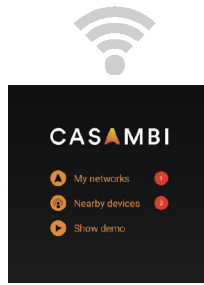


Remote Power Supply or IC-Rated Casambi system wiring diagram

Blue sky, Sunrise or Sunset, Moon and Circadian Scenes are pre-programmed at the factory. Mobile app synchronisation required at the time of installation and when building power is disconnected.



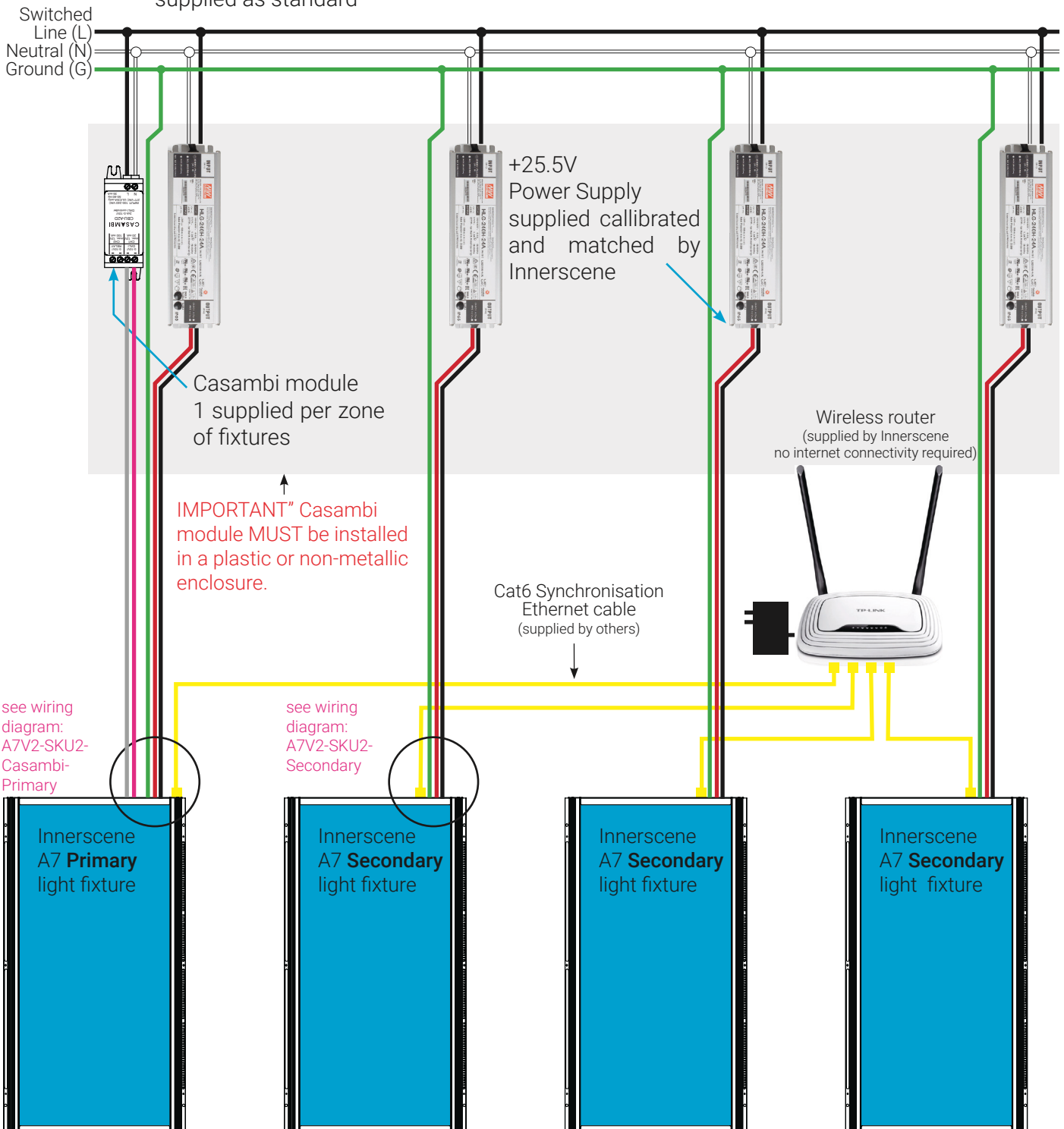
Casambi Xpress Wall Mountable Controller supplied as standard



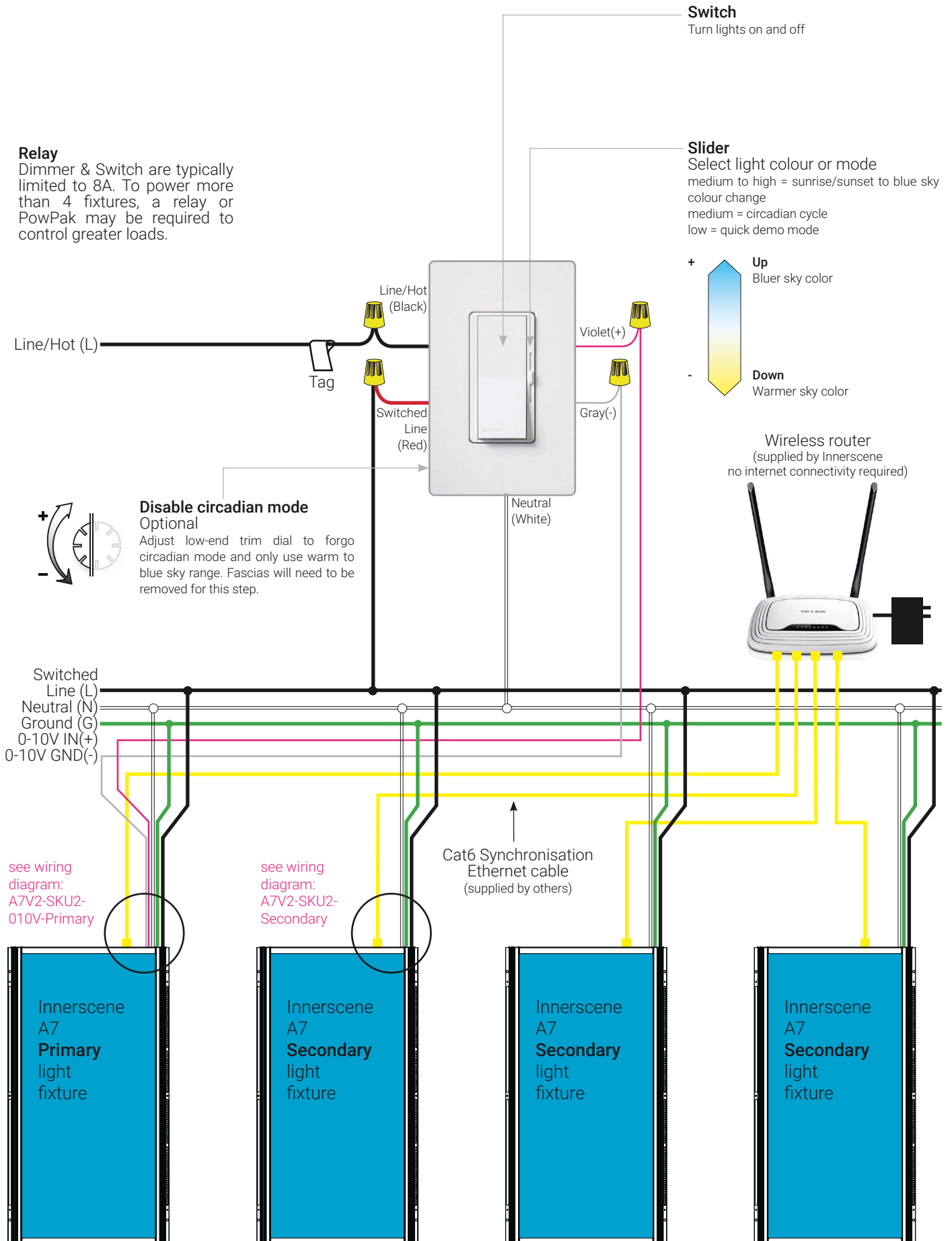
Casambi App on Phone or Tablet



Optional Motion or Light sensor

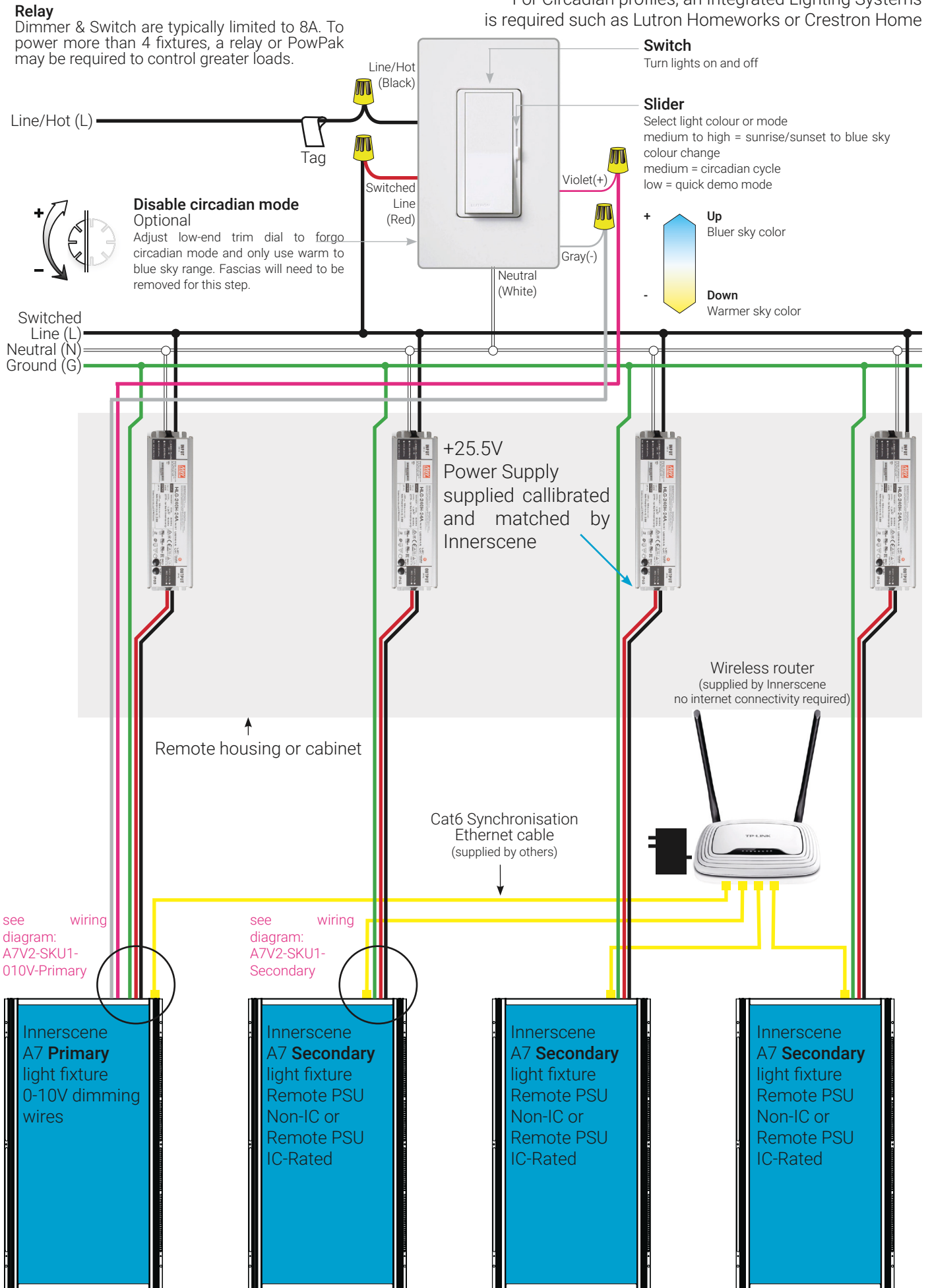


For Circadian profiles, an Integrated Lighting Systems is required such as Lutron Homeworks or Crestron Home



Remote Power Supply or IC-Rated 0-10V system wiring diagram

For Circadian profiles, an Integrated Lighting Systems is required such as Lutron Homeworks or Crestron Home



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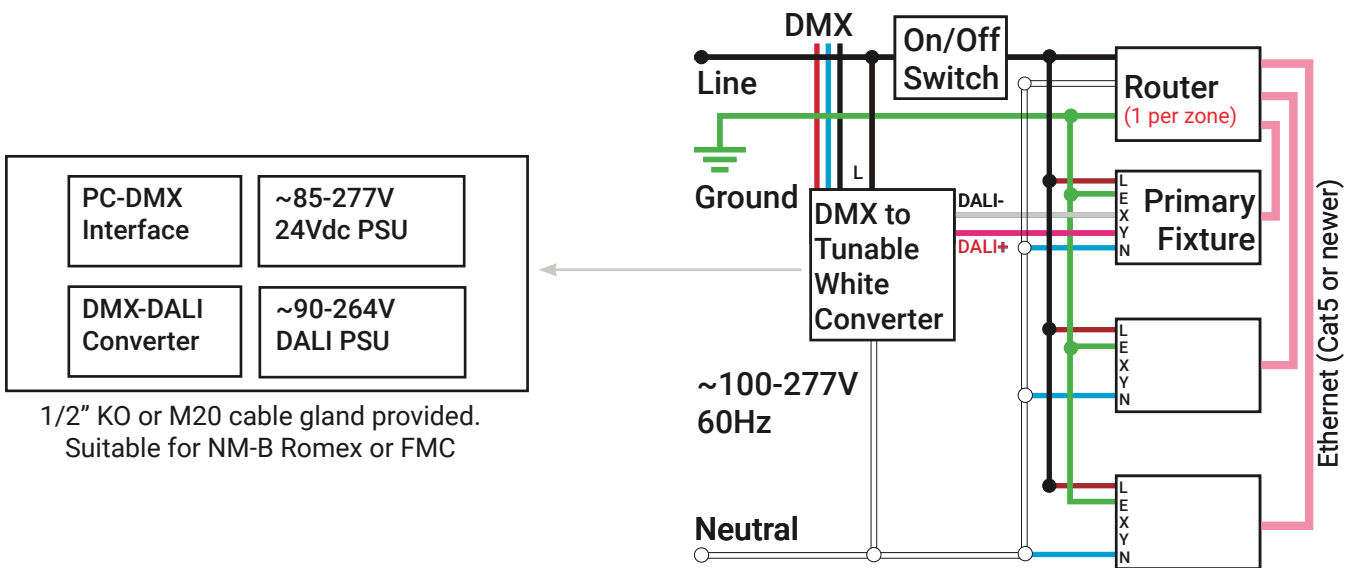
Wiring Key

Colour	DALI bus	Primary	Gauge (ensure wire current capacity are not exceeded)
Brown	Live	L1(Live)	Single 1.0 to 4.0 mm ² , Daisy chain 1.0 to 2.0 mm ²
Blue	Neutral	N(Neutral)	Same as Live
Green/Yellow	Earth	Earth	Same as Live
Gray	DALI+	2	Single 0.5 to 4.0 mm ² , Daisy chain 0.5 to 2.0 mm ²⁺
Black	DALI-	3	Same as above

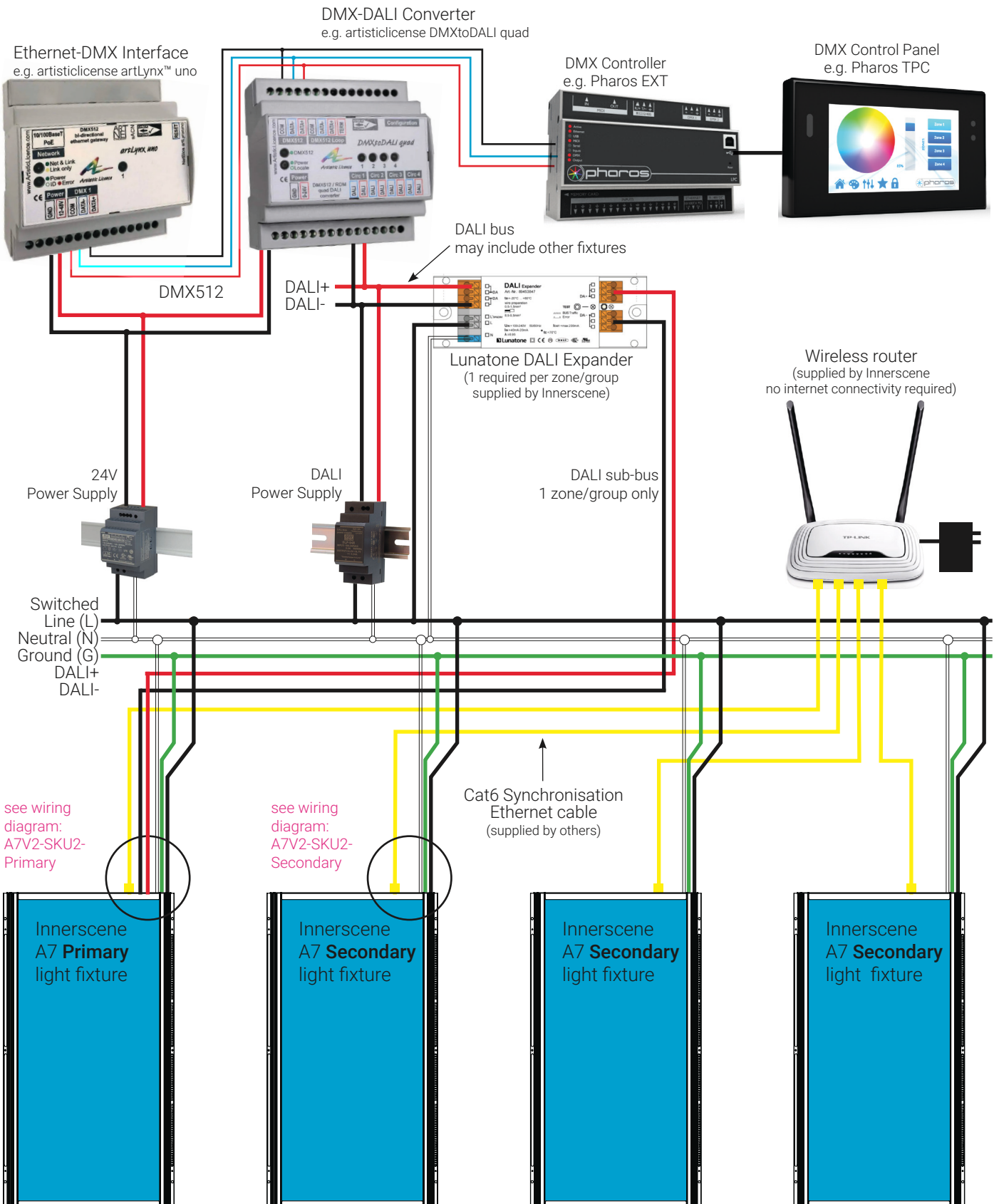
Simplified Wiring Diagram

DMX

Circadian mode is dependent on DMX control system. DMX Controller needs to have two independent channels. By default channel 1 is brightness. Channel 2 is colour. To reassign channel contact Factory.



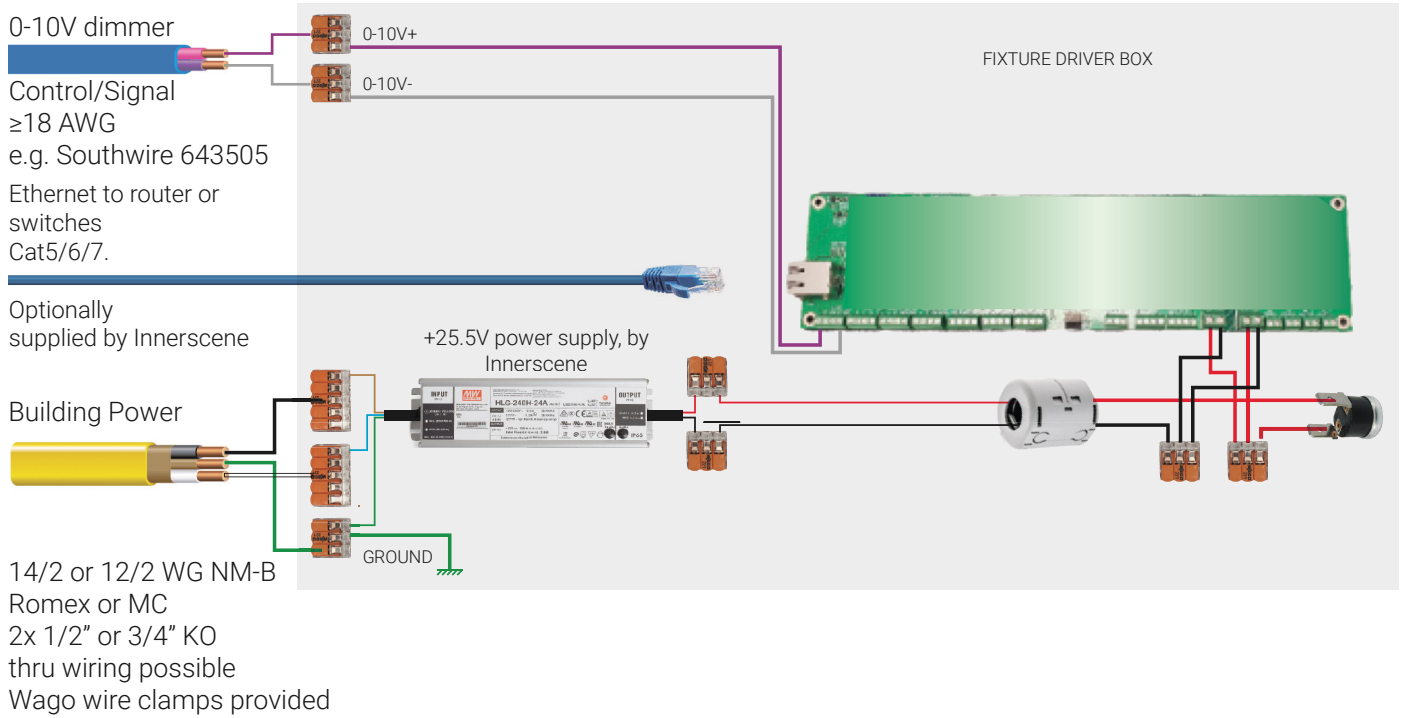
For programming refer to Recommended presets and Circadian animations



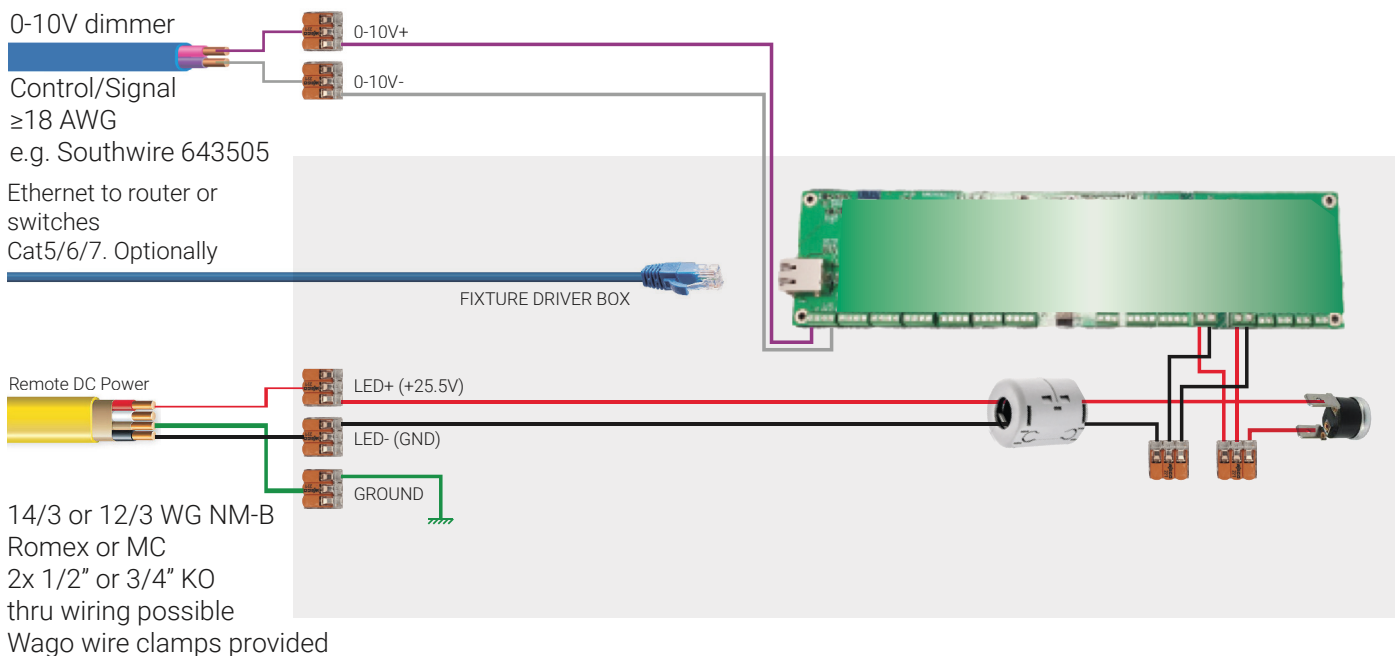
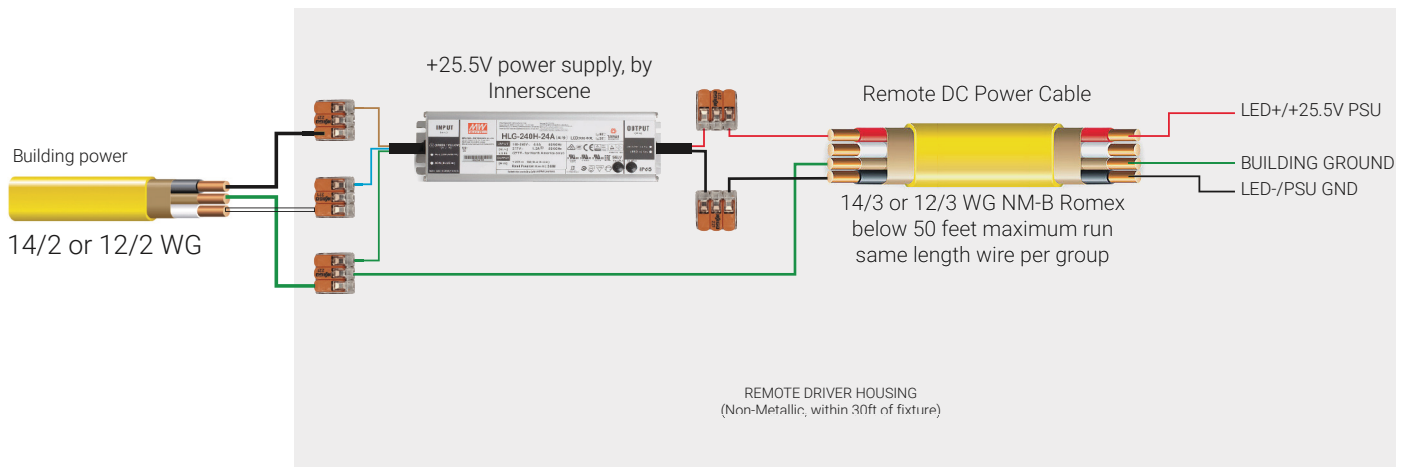
Wiring diagrams

Integral Power Supply and 0-10V Primary Fixture electrical wiring

A7V2-SKU2-010V-Primary Wiring Diagram

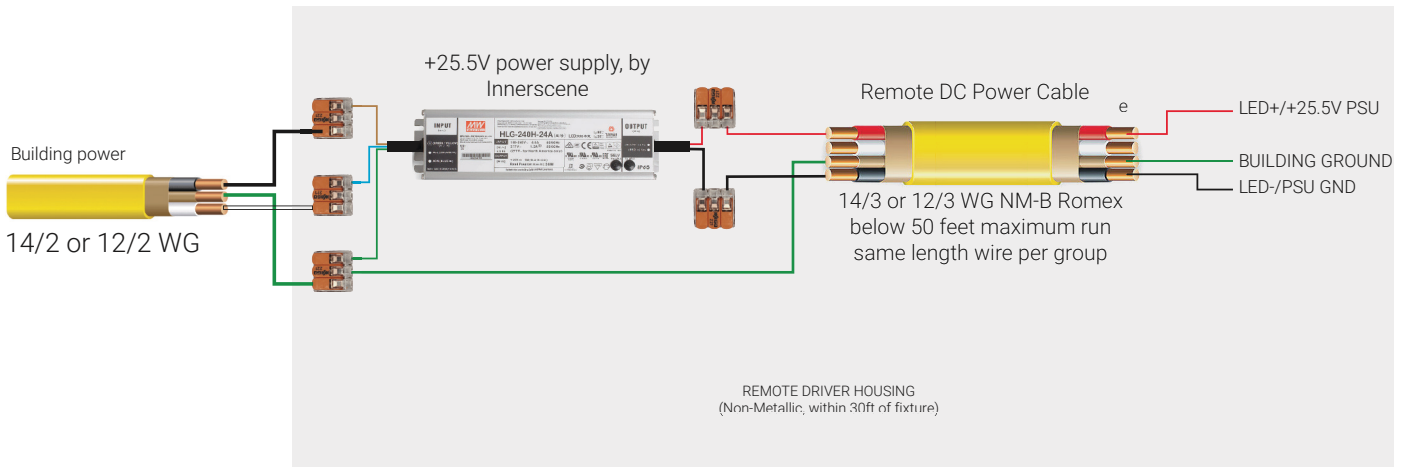


A7V2-SKU1-010V-Primary, A7V2-SKU3-010V-Primary Wiring Diagram

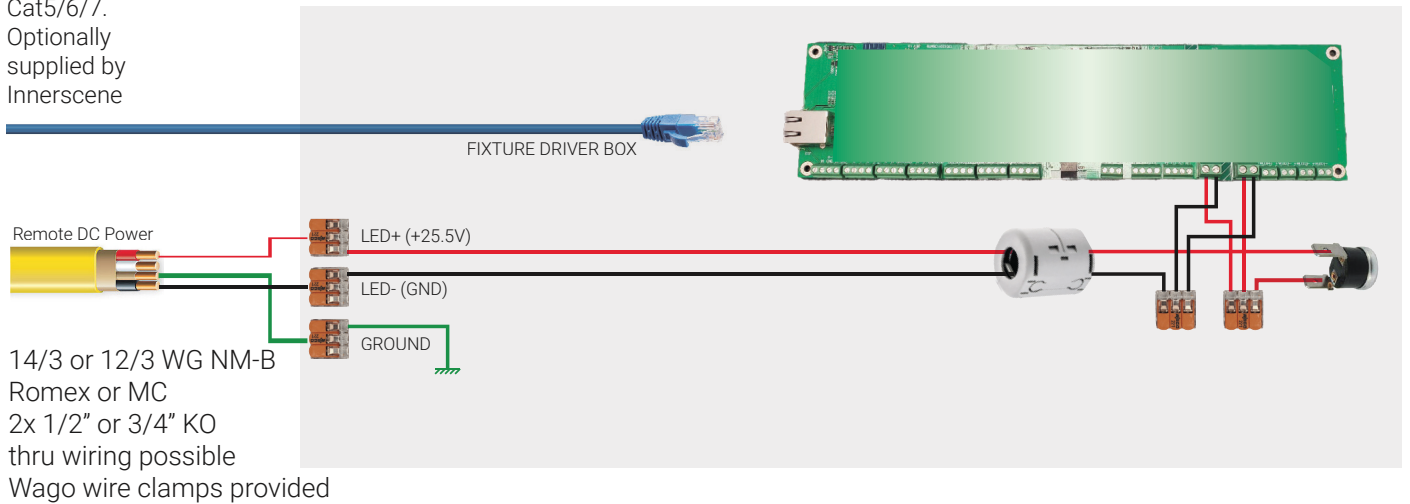


All wires for the same zone must be exactly the same gauge and length to minimise colour shifts. Factory calibrated with matching LED driver to NM-B Romex 12/2 WG at exactly 100ft. or 12/2 WG 50ft. Do not mix LED drivers in the same batch. Consult factory if using different gauge or cable length as this will result in different brightness or colours. Voltage must be adjusted exactly 25.5Vdc at the fixture.

A7V2-SKU1-Secondary, A7V2-SKU3-Secondary Wiring Diagram



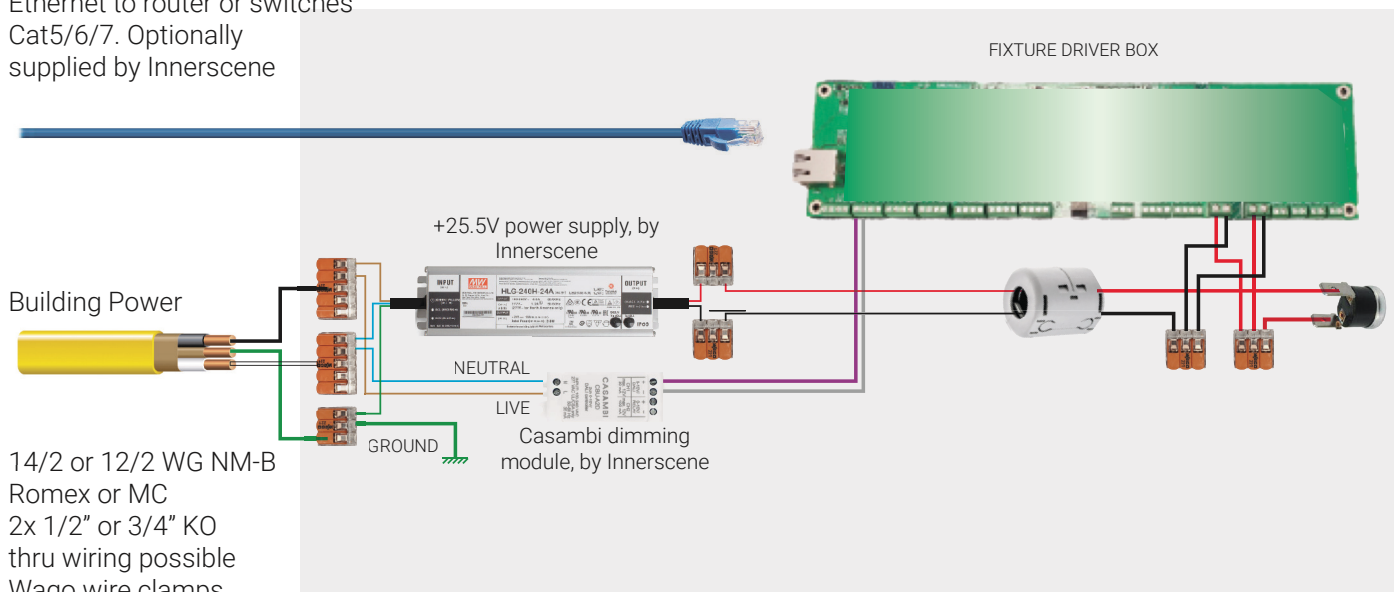
Ethernet to router
or switches
Cat5/6/7.
Optionally
supplied by
Innerscene



All wires for the same zone must be exactly the same gauge and length to minimise colour shifts. Factory callibrated with matching LED driver to NM-B Romex 12/2 WG at exactly 100ft. or 12/2 WG 50ft. Do not mix LED drivers in the same batch. Consult factory if using different gauge or cable length as this will result in different brightness or colours. Voltage must be adjusted exactly 25.5Vdc at the fixture.

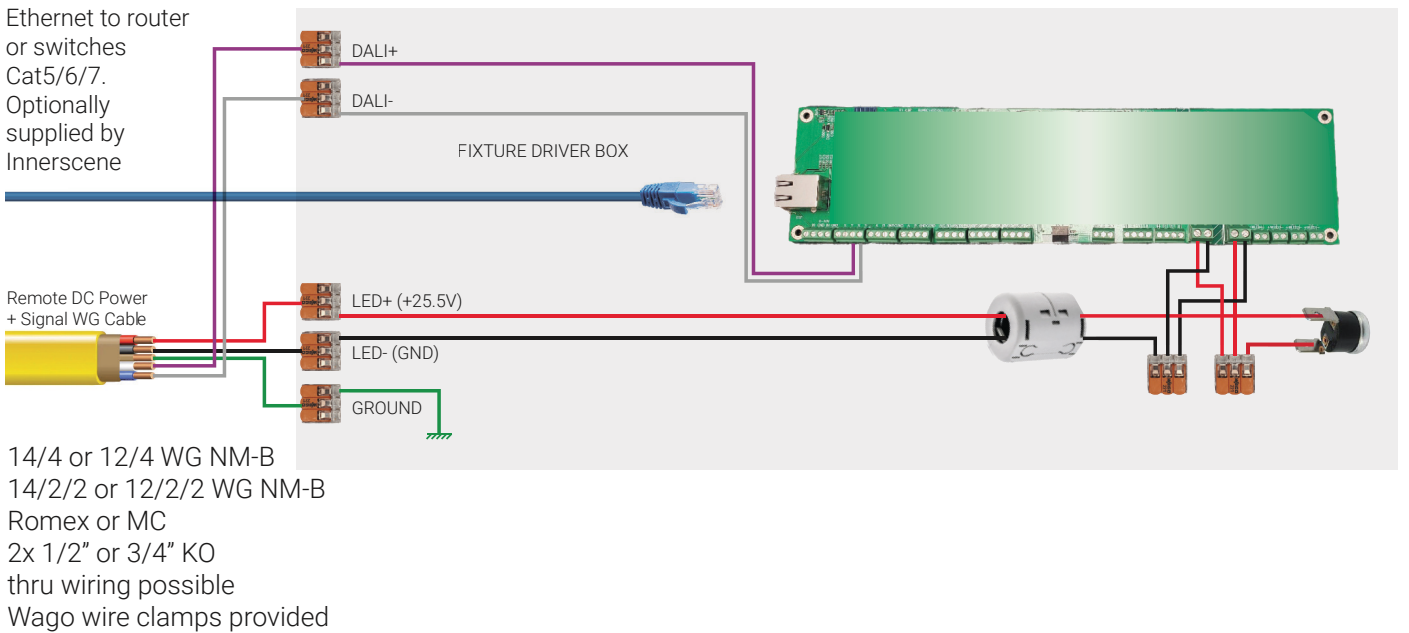
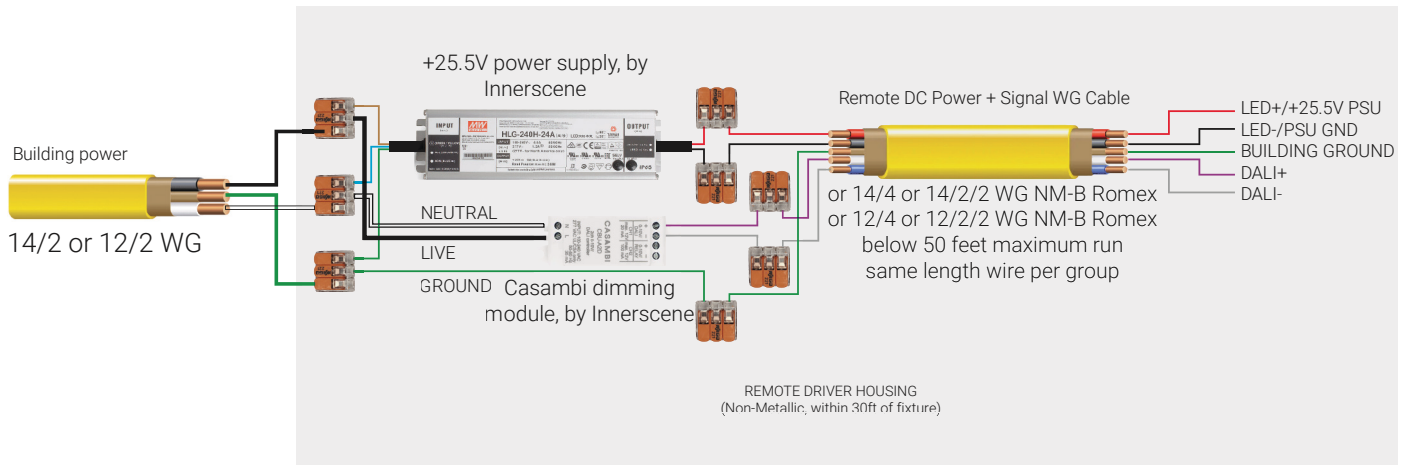
A7V2-SKU2-Casambi-Primary Wiring Diagram

Ethernet to router or switches
Cat5/6/7. Optionally
supplied by Innerscene



14/2 or 12/2 WG NM-B
Romex or MC
2x 1/2" or 3/4" KO
thru wiring possible
Wago wire clamps
provided

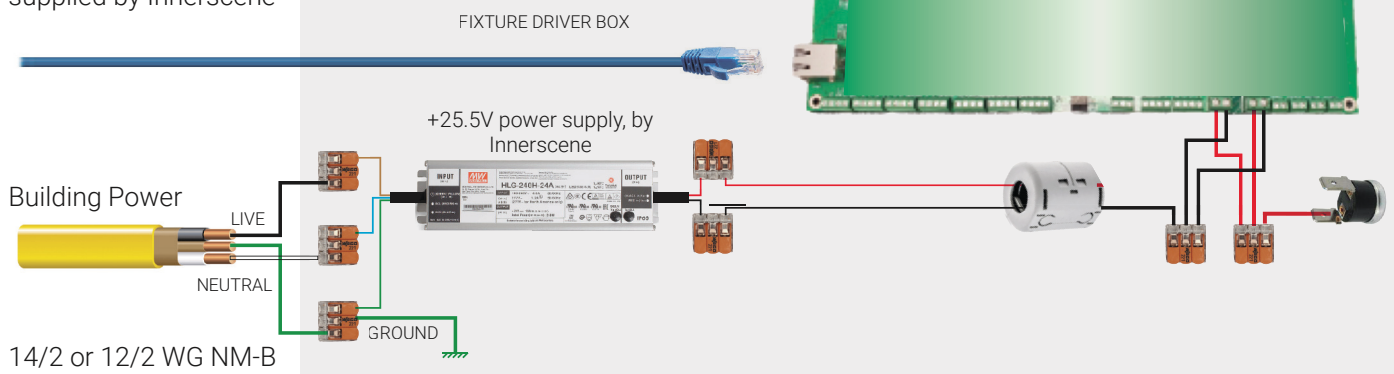
A7V2-SKU1-Casambi-Primary, A7V2-SKU3-Casambi-Primary Wiring Diagram



All wires for the same zone must be exactly the same gauge and length to minimise colour shifts. Factory callibrated with matching LED driver to NM-B Romex 12/2 WG at exactly 100ft. or 12/2 WG 50ft. Do not mix LED drivers in the same batch. Consult factory if using different gauge or cable length as this will result in different brightness or colours. Voltage must be adjusted exactly 25.5Vdc at the fixture.

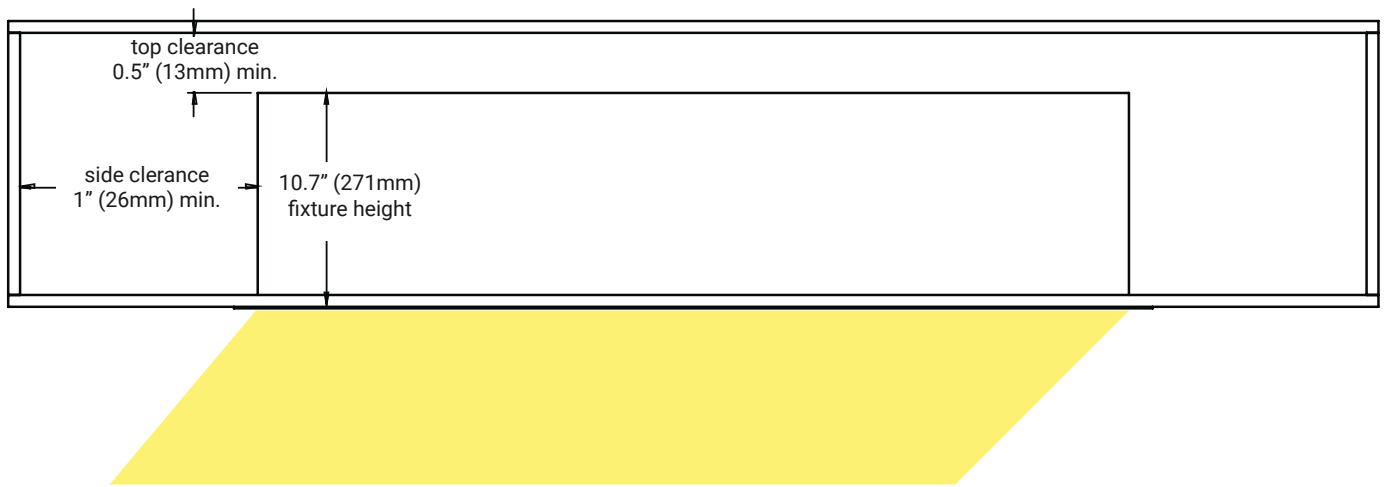
A7V2-SKU2-Secondary Wiring Diagram

Ethernet to router or switches
Cat5/6/7. Optionally
supplied by Innerscene

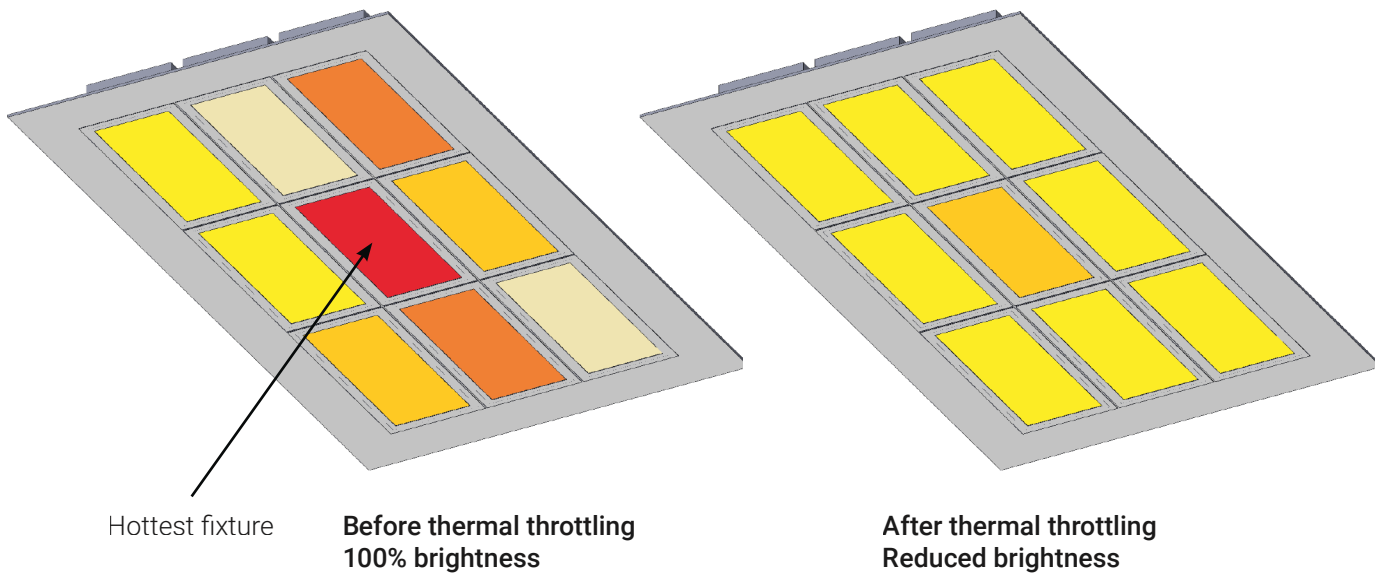


14/2 or 12/2 WG NM-B
Romex or MC
2x 1/2" or 3/4" KO
thru wiring possible
Wago wire clamps provided

See below for recommended clearance between the fixture or fixtures and surrounding structure or insulation.



Innerscene A7 light fixtures have internal smart thermal protection. When any fixture within a group become too hot it will automatically reduce the brightness of the group. When the temperature becomes excessively high, power will be cut-off from the fixture until it sufficiently cool down. If this persist, please lower the ceiling temperature or obstruction to allow the ceiling void to cool down and consult the factory.



WARNING

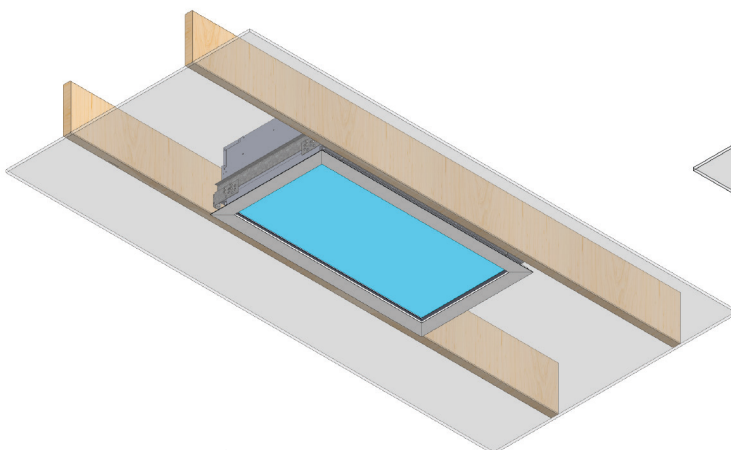
Read all safety instructions included with the fixture before installation. Install product in accordance with local and national electrical codes, by a qualified electrician or installer.

Failure to comply with the installation instructions may result in serious injury or death.

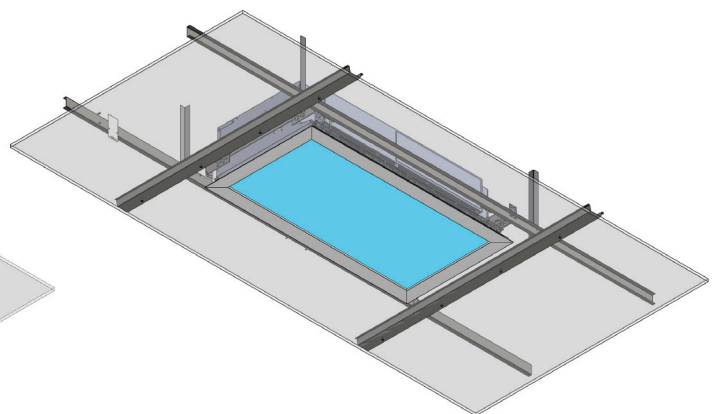
This is a sensitive electro-optical device with glass components. Care must be taken during storage and handling. Store in a clean, cool and dry location. Electrostatic discharge (ESD) can permanently harm this product. Avoid static discharge while handling this product.

Innerscene is not responsible for the structural integrity of the building to support the fixture. Additional backing may be required. If in doubt consult a qualified structural engineer.

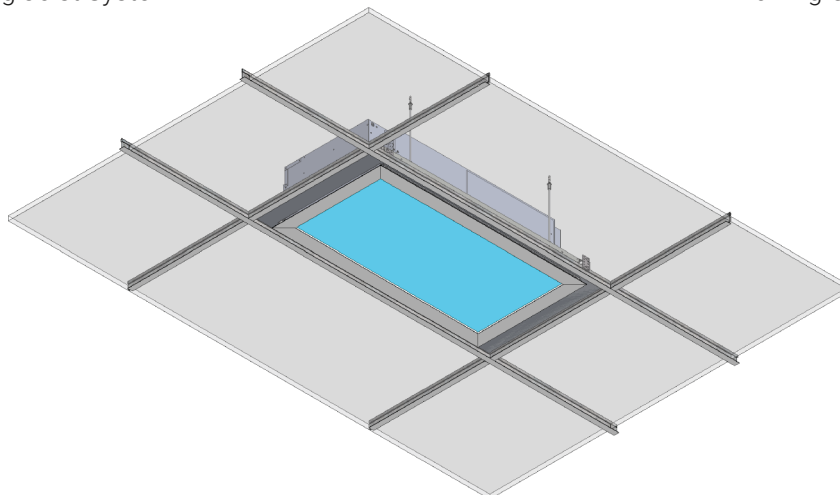
Model A7V2 can be installed in a variety of ceiling types. As standard, we recommend opting for our New Construction (NC) Housing. This will help facilitate installation into ceilings or roofs with wood joists, grid ceilings or metal furring ceilings.



Ceiling Joist System



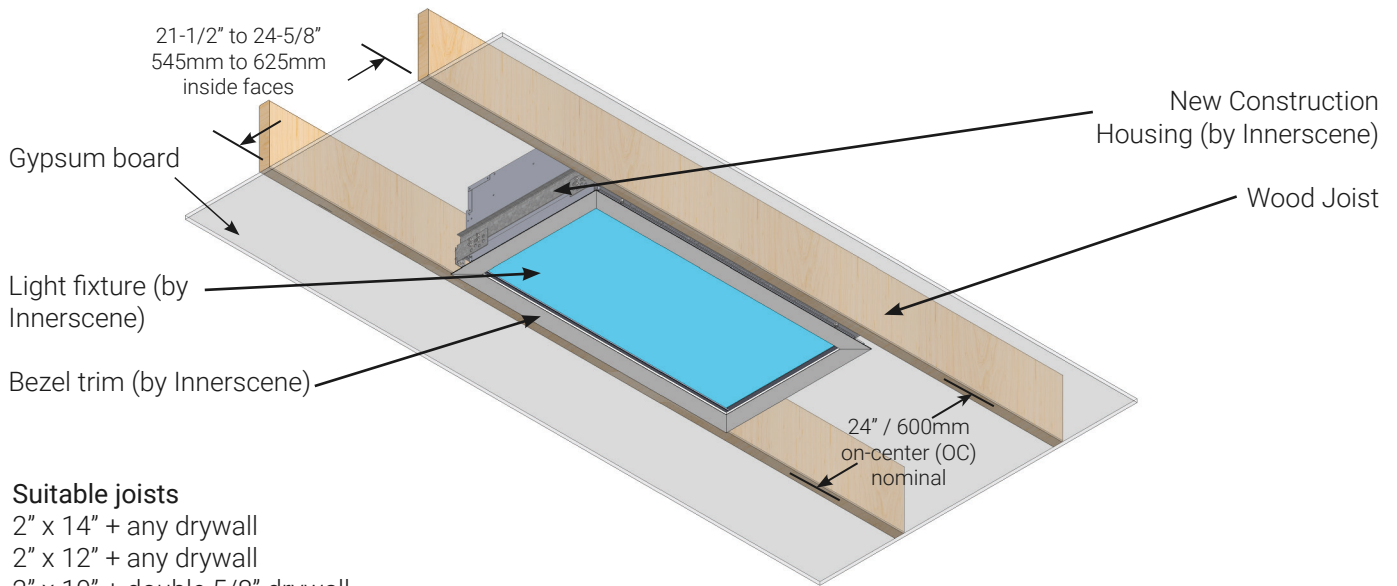
Furring Channel System



Ceiling Grid System

Mounting options - New Construction (NC) Housing with Timber Joists

Universal mounting option suitable for remodelling or retrofit on wood joists with typical spacings of 24" or 600mm. The NC housing would also be suitable for use in 2' x 4' or 1200x600mm grid ceilings.



Suitable joists

2" x 14" + any drywall

2" x 12" + any drywall

2" x 10" + double 5/8" drywall

12" x 2" (50mm x 300mm or 46mm x 295mm or 48mm x 305mm actual)

300mm I-Joist + any plasterboards

253mm Posi-Joist + 12.5mm plasterboard

240mm I-Joist + 2x15mm plasterboards

Ceiling with lower total depth (joist + drywall/plasterboard) will need to be lowered to accommodate the total depth 11" or 270mm. Alternatively, a raft could be constructed to accommodate the light fixture.

Recommended equipment for ceilings below 15 feet or 4.5m: (For taller ceilings, temporary support structures or lifts may be required)

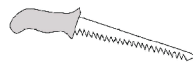
Drywall panel hoist



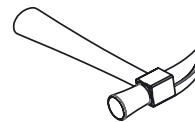
Joist hanger nails or screws



Drywall saw



Hammer



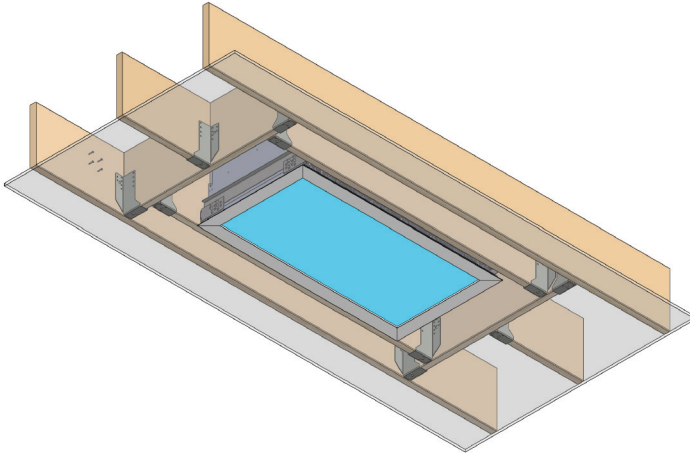
Wire stripper / cutter



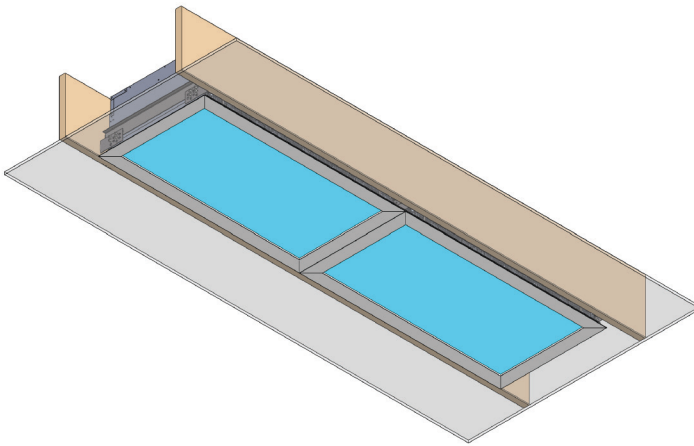
Hex Nut Spinner



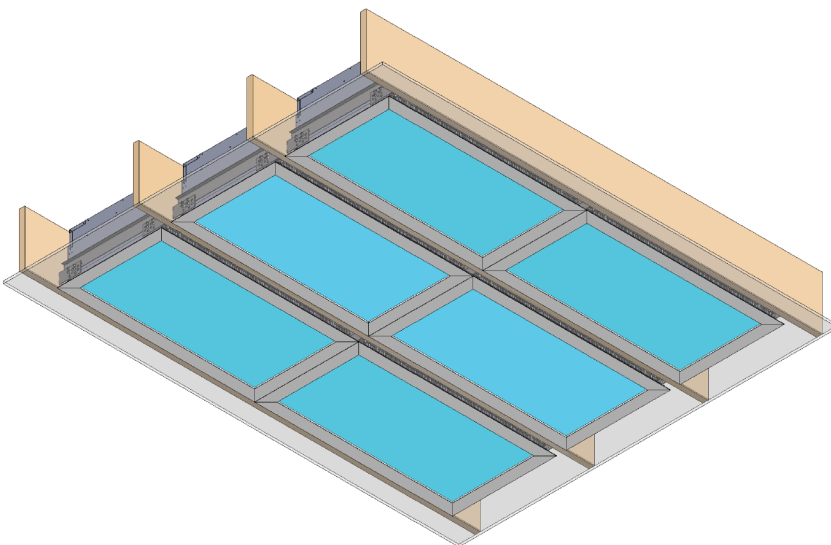
Alternative configurations - 16" or 450mm Joist Ceilings



Alternative configurations - Line (1x2)

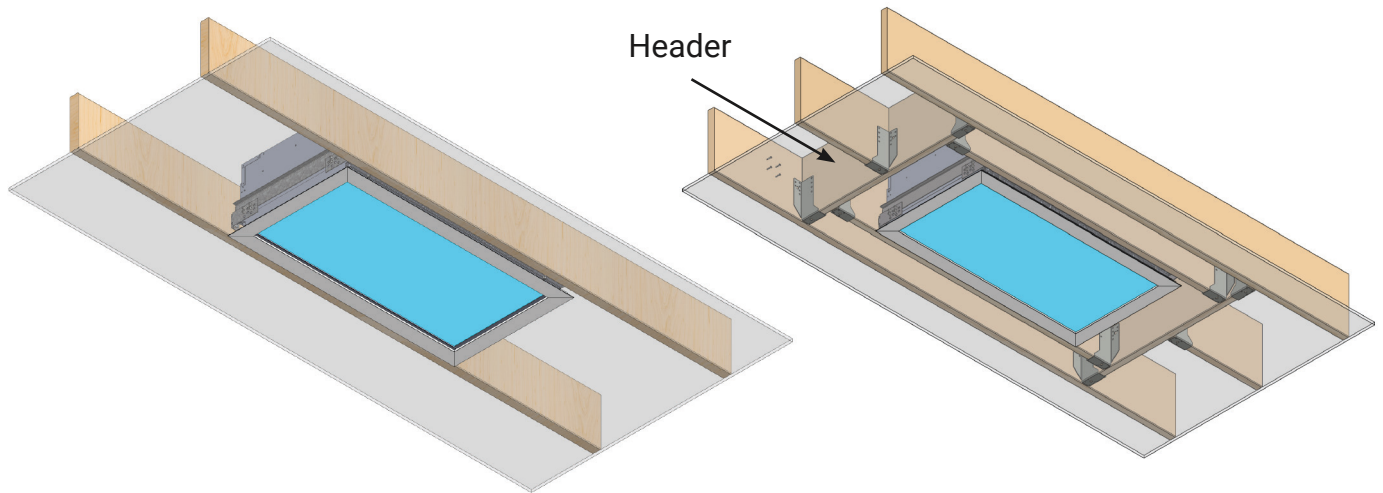


Alternative configurations - Array (3x2)



Identify installation location.

Between existing 24" OC joists (600mm centre-to-centre spacing). Some ceiling with narrower joist spacings such as 16" or 450mm may have to be modified with headers to accommodate the fixture. Consult local building codes on structural modifications.



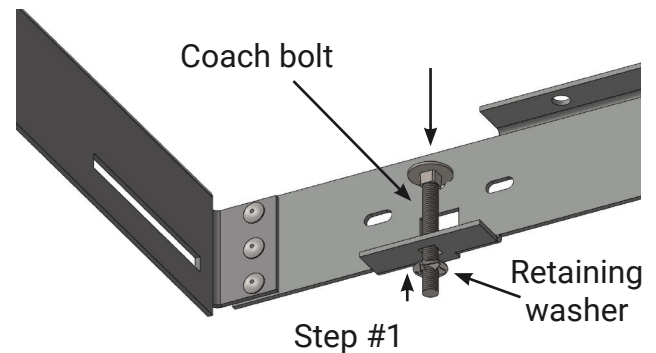
24" OC joists (600mm centre-to-centre spacing) ceilings.

16" OC joists (450mm centre-to-centre spacing) ceilings.

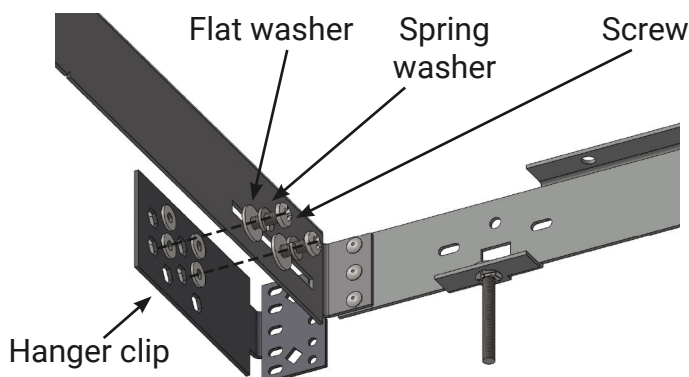
Prepare the New Construction (NC) Housing at ground level. Secure the four coach bolts with the retaining washers (Step #1). Then loosely screwing in the four hanger clips (Step #2).



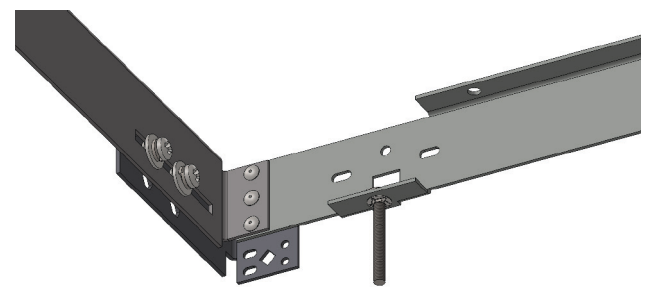
New Construction (NC) Housing



Step #1

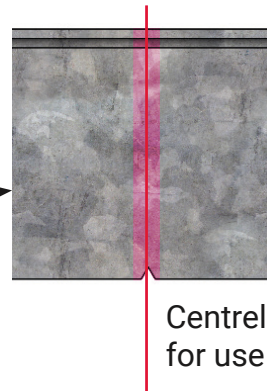
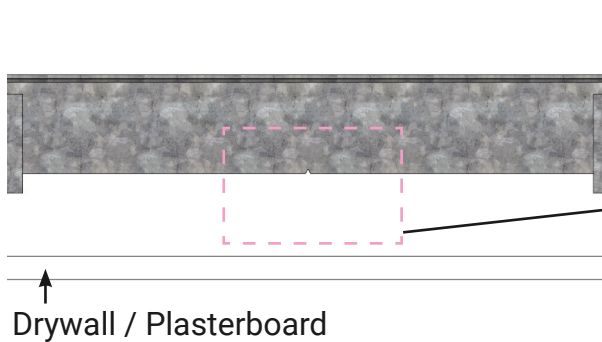
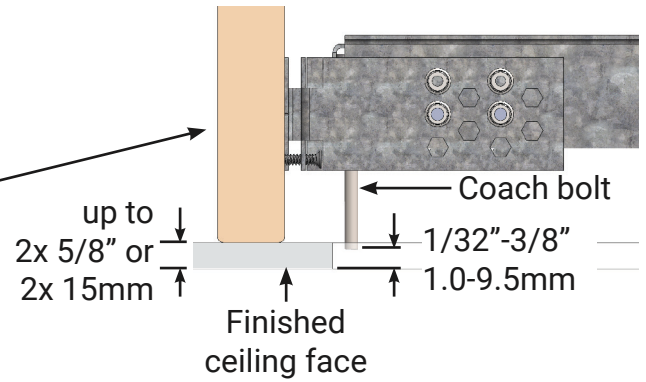
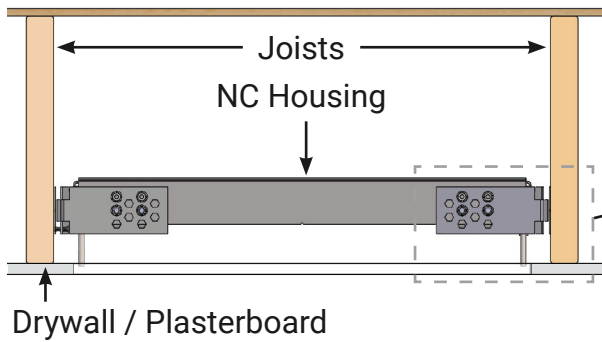
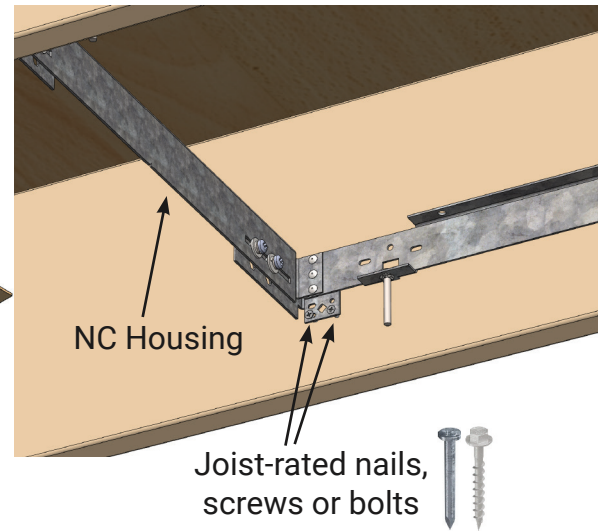
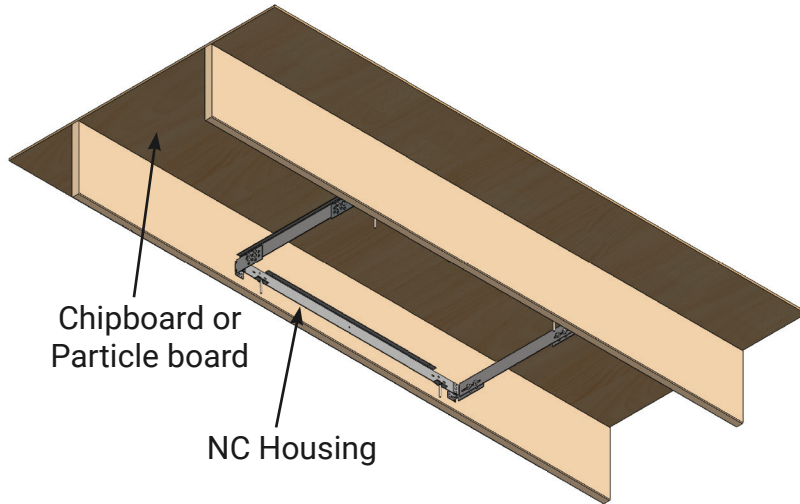


Step #2



Assembled

Secure NC Housing to joist ceiling using either joist-rated wood nails or screws or bolts.



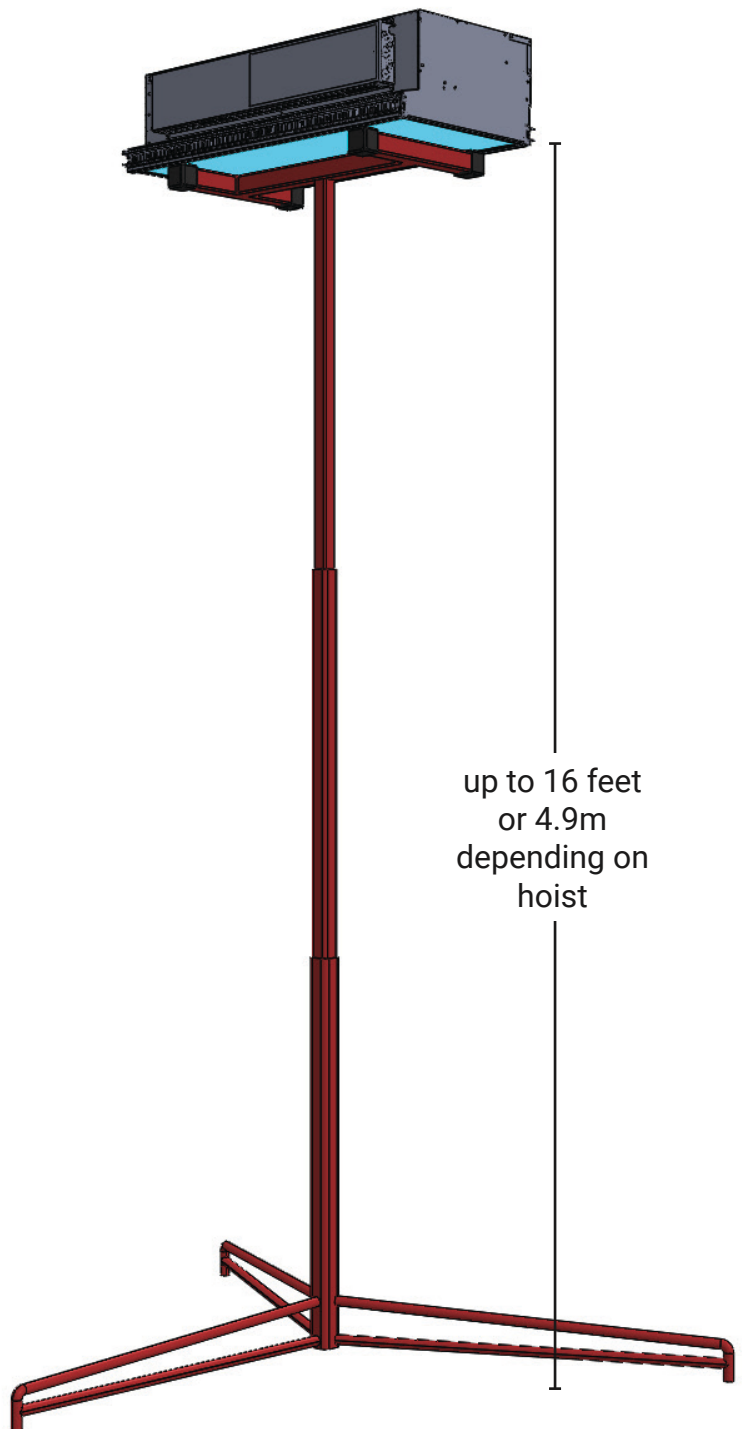
Carefully place lighting fixture on a Drywall hoist



Drywall Hoist or Plasterboard Lift typically available to for up to 16ft or 4.9m ceiling height

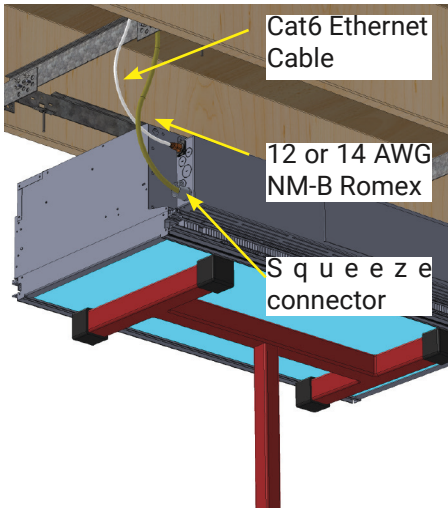
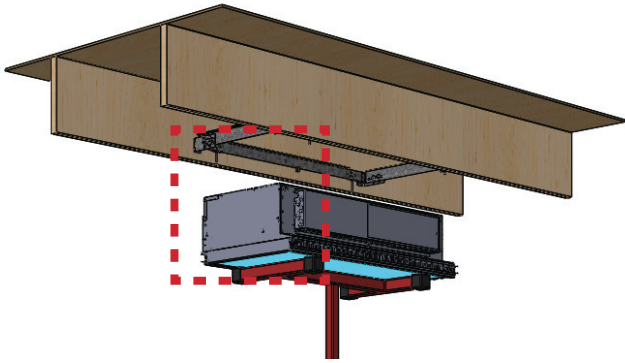


Ensure fixture is properly supported and resting on the metalwork and not the fragile glass parts. Do not remove blue protective film at this stage.

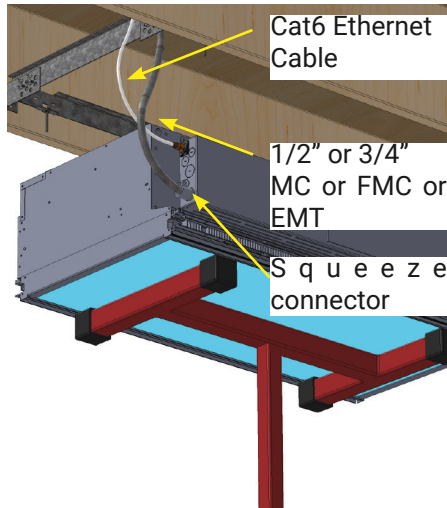


Slowly elevate to ceiling

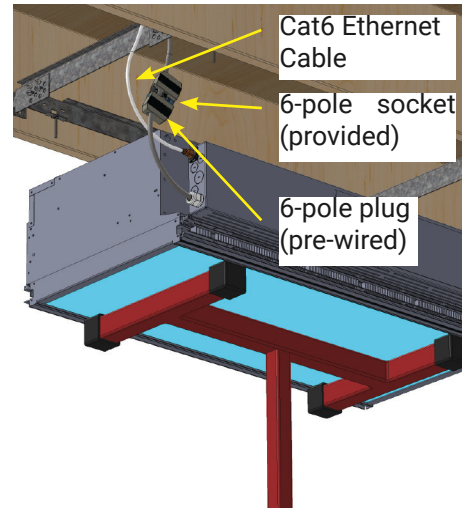
Make electrical and data connections before raising into the ceiling void



North American model: 12/2 or 12/4 or 14/2 or 14/4 WG NM-B Romex with 1/2" or 3/4" KO. Cat6 Ethernet cable

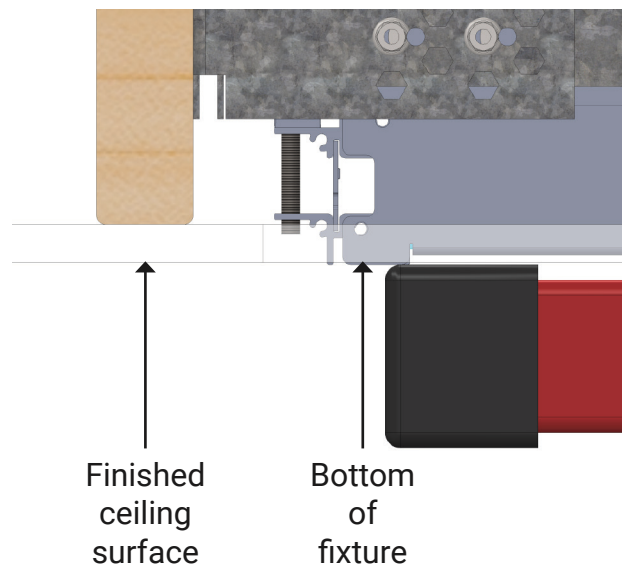
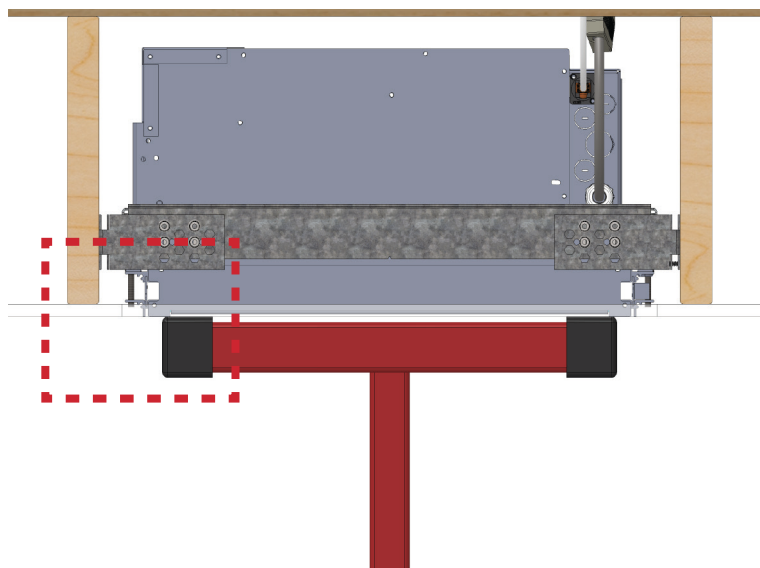


North American model: 12/2 or 12/4 or 14/4 or 14/4 WG MC or FMC or EMT with 1/2" or 3/4" KO. Cat6 Ethernet cable



International model: 3-core 2.5mm² LSZH or CPR-rated, cable OD 6.5-8.6mm, 6-pole socket. Cat6 Ethernet cable

Raise fixture until the bottom of the fixture is level with the finished ceiling surface



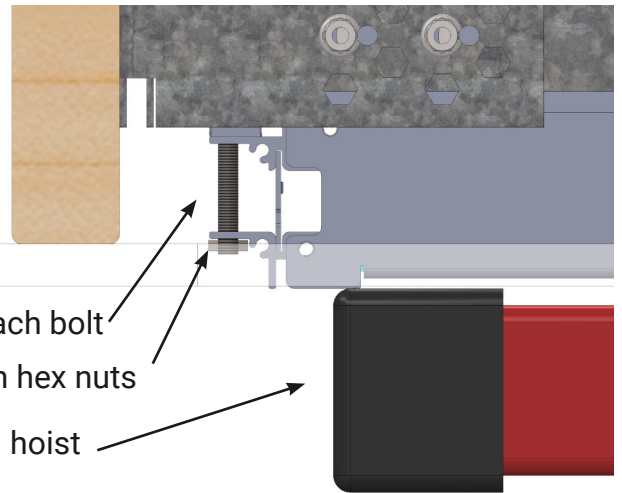
Use M6 thin hex nuts (provided) to adjust the level of the fixture to the NC (New Construction) Housing.

Gradually lower the drywall hoist to load the fixture on the hex nuts.

Use the optional 10mm hex nut spinner (nut driver / nut driver / nut screwdriver).

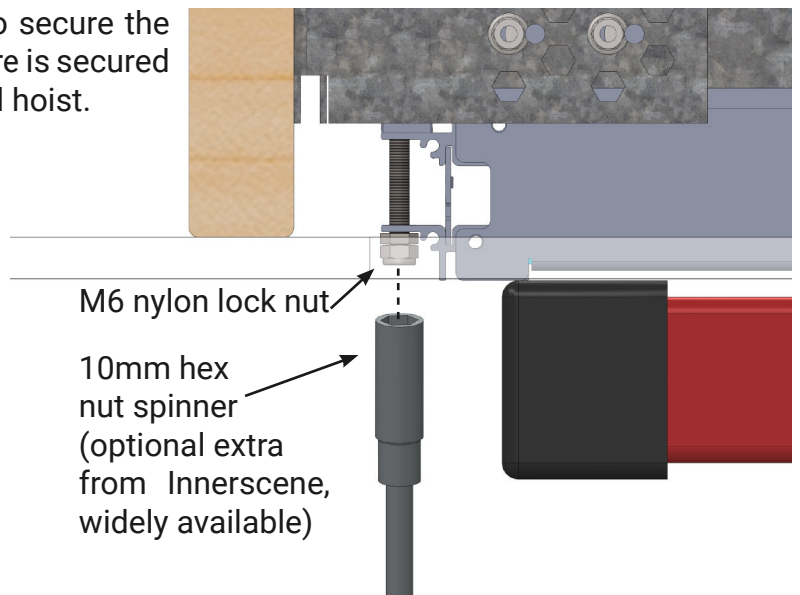
Do not use impact driver.

M6 coach bolt
n hex nuts
I hoist



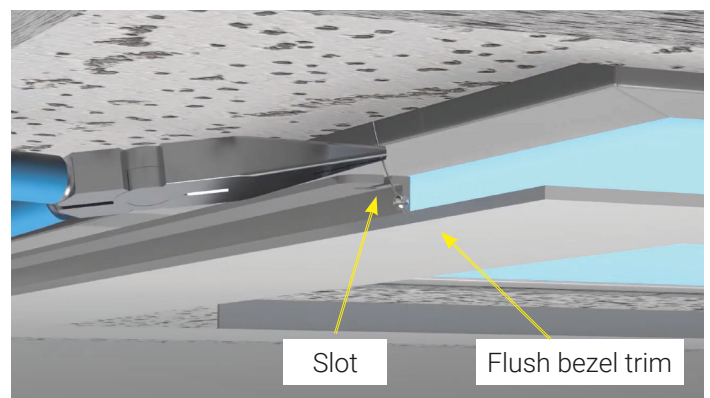
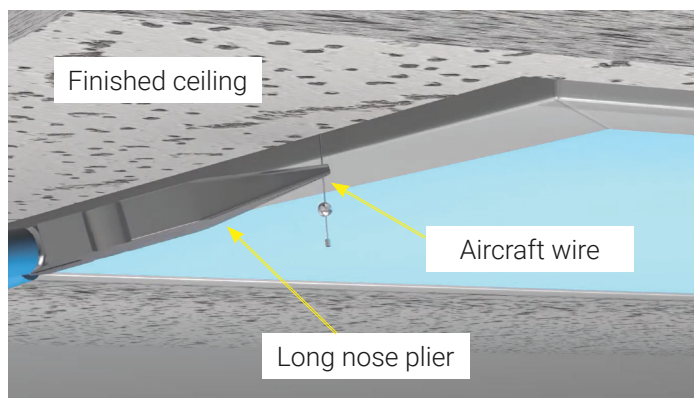
Use M6 nylon hex lock nuts (provided) to secure the fixture to the NC Housing. Ensure the fixture is secured on the ceiling before removing the drywall hoist.

M6 nylon lock nut
10mm hex nut spinner (optional extra from Innerscene, widely available)



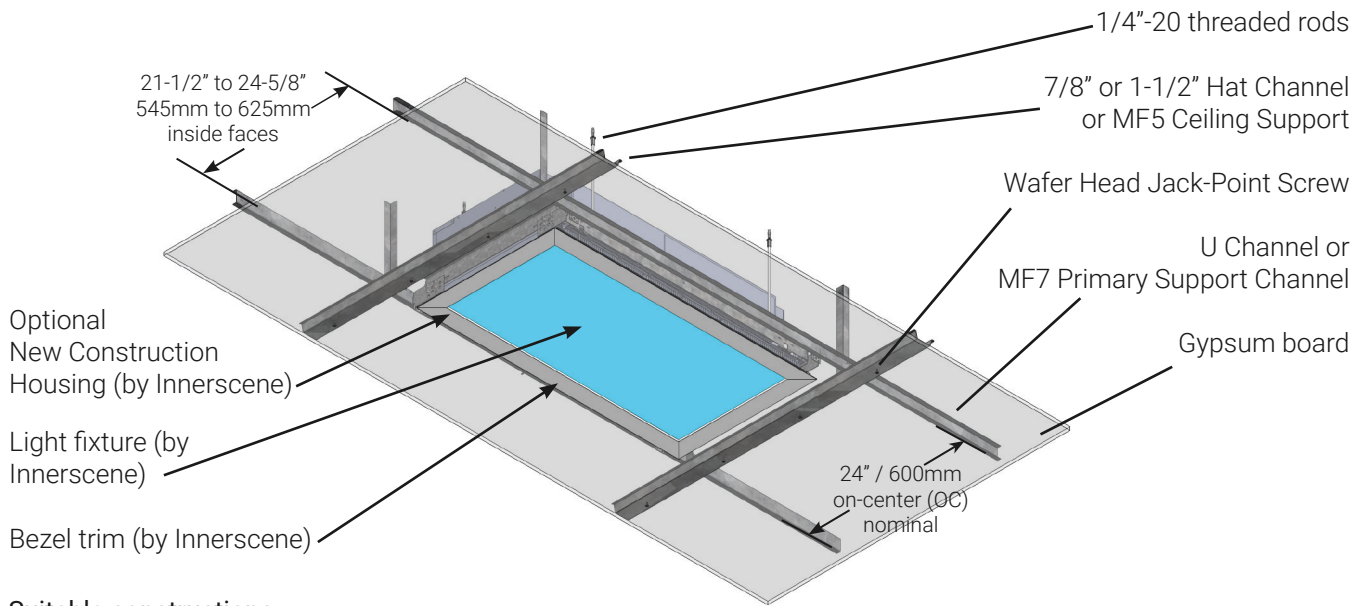
Install drywall with correct cut-out
20"-15/16 by 38"-5/8
532mm by 981mm

Once the ceiling has been finished. Using a long nose (needle nose) plier. Grab one of the four aircraft wires hanging from the fixture and pull it down and slot into the slots on the Bezel Trim. The wires are spring loaded and will pull up the trim.



Repeat on all four aircraft wires to complete

Universal mounting option suitable for remodelling/retrofit or new construction using metal ceiling lined



Suitable constructions

Steel hat channels or Metal furring channels

Recommended total depth at least 11" or 270mm.

Depending on local building codes, additional threaded rods may be required to support the fixture.

Recommended equipment for ceilings below 15 feet or 4.5m: (For taller ceilings, temporary support structures or lifts may be required)

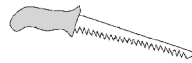
Drywall panel hoist
11feet or 15feet



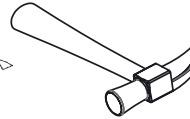
Metal furring or self drilling screws and power drill



Drywall saw



Hammer



Wire stripper or cutter



M6 Masonry anchors or
1/4"-20 steel stud anchors



8x M6 or 1/4"-20 thin nuts
e.g. McPrimary-Carr 91078A029



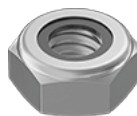
4x M6 or 1/4"-20 threaded rods
e.g. McPrimary-Carr 95475A550



4x M6 or 1/4"-20 coupler
e.g. McPrimary-Carr 90264A435

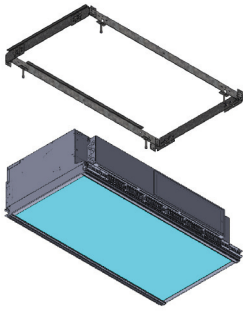


4x M6 or 1/4"-20 nylon locknuts
e.g. McPrimary-Carr 90566A029

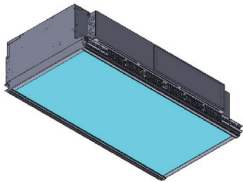


Hex nut spinner

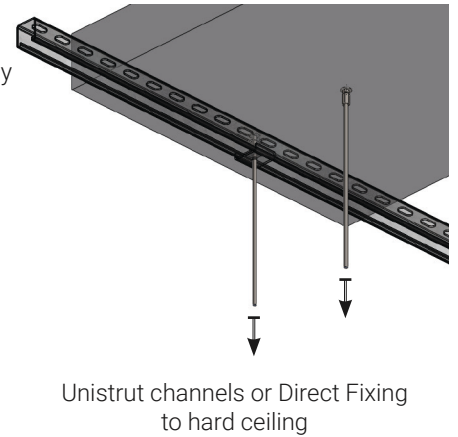
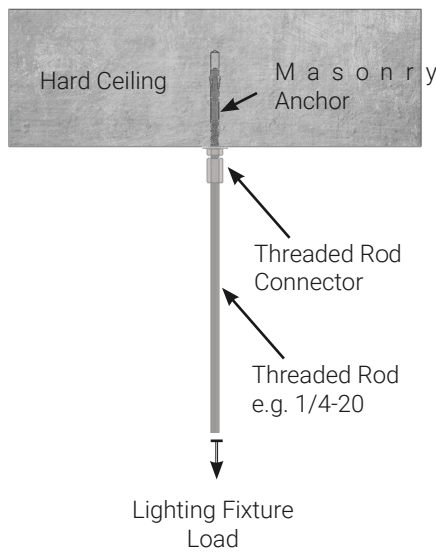
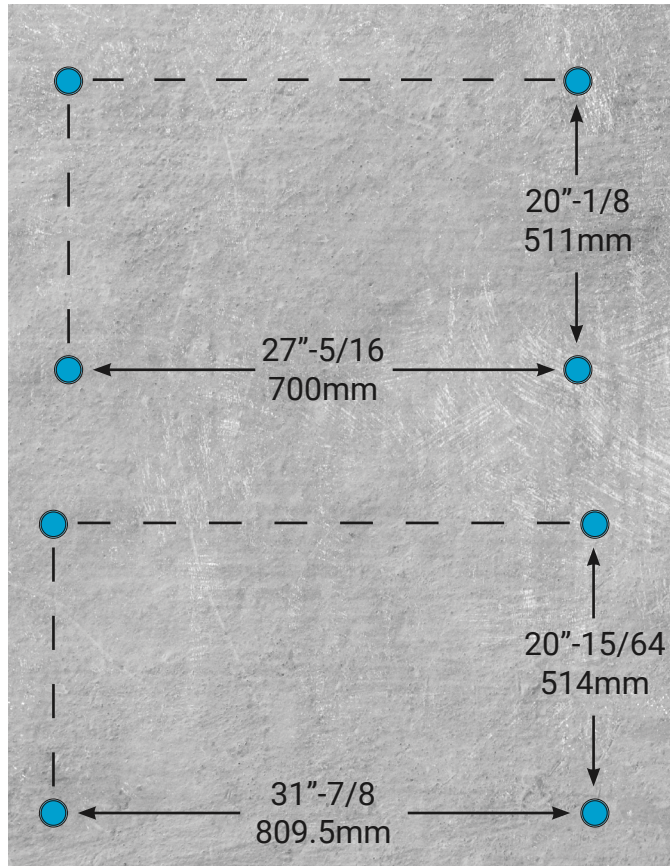




Fixing Locations on Hard Ceiling with NC Housing



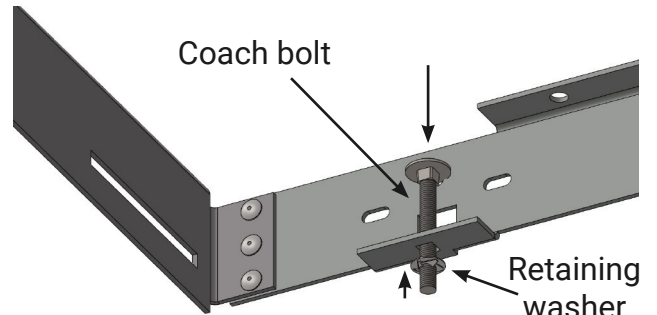
Fixing Locations on Hard Ceiling without NC Housing



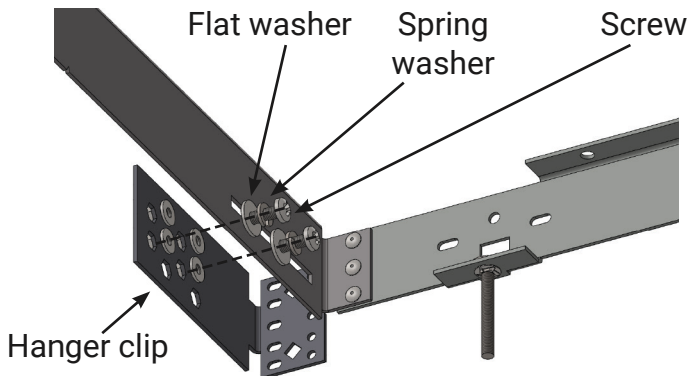
Prepare the New Construction (NC) Housing at ground level. Secure the four coach bolts with the retaining washers (Step #1). Then loosely screwing in the four hanger clips (Step #2).



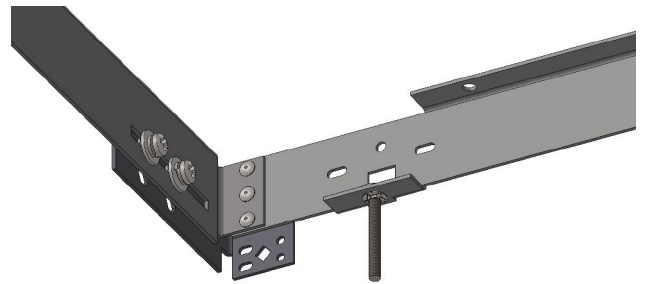
New Construction (NC) Housing



Step #1

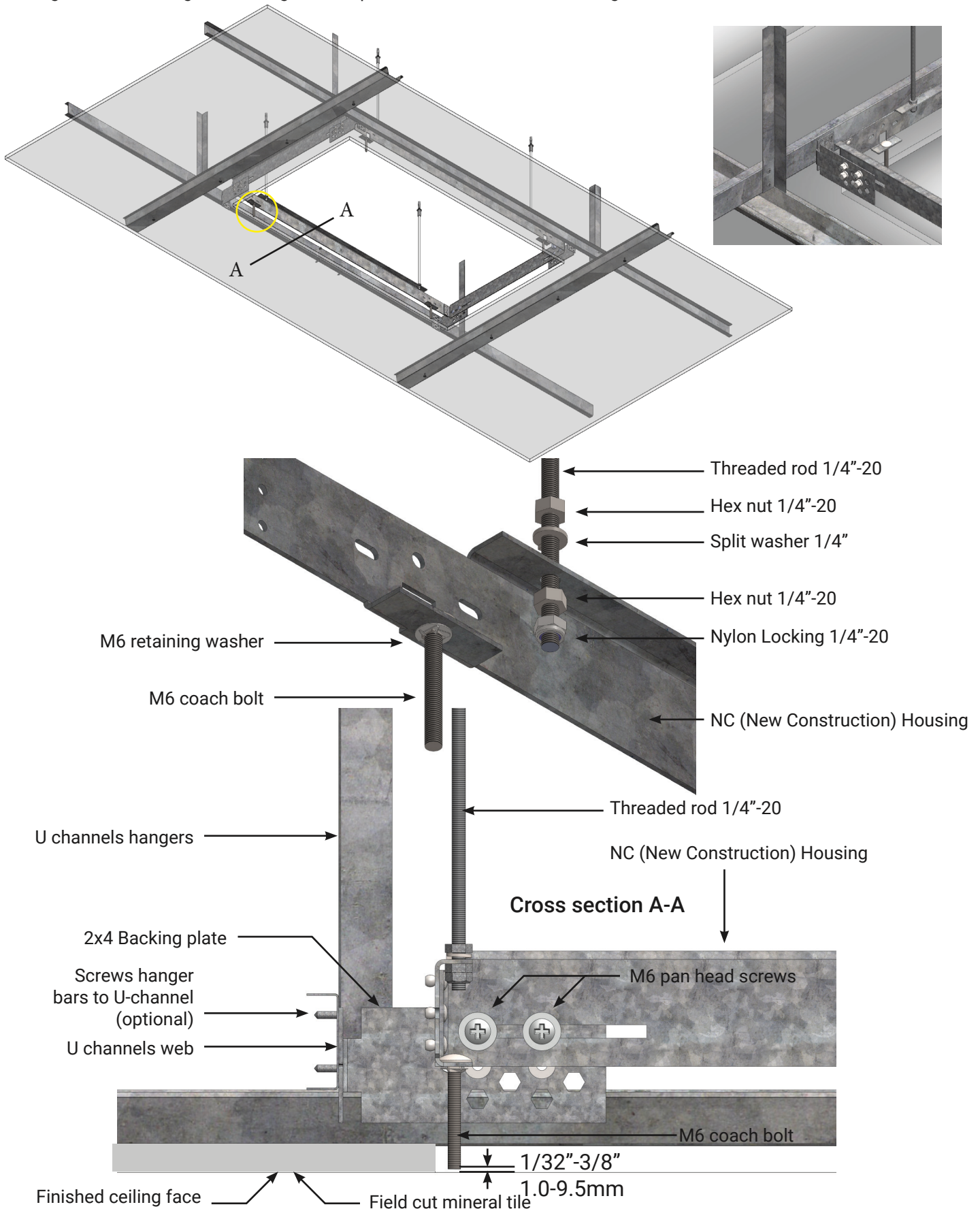


Step #2



Assembled

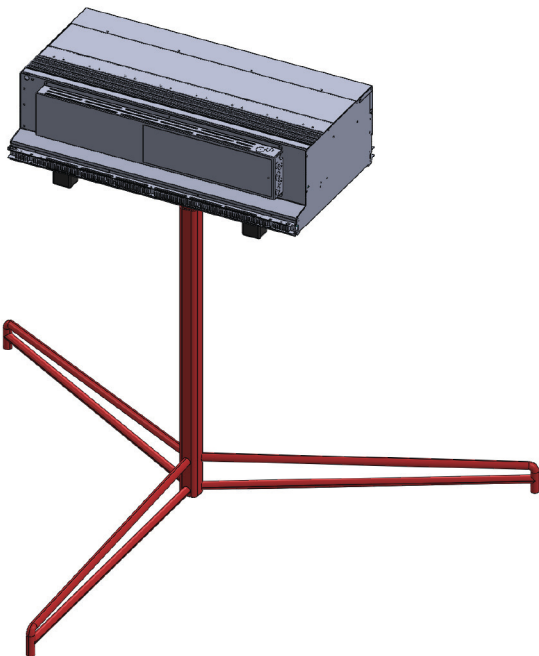
Align NC Housing so bottom of M6 coach bolts are between 1/32" and 3/8" from bottom of finished ceiling face. Hang NC Housing from 1/4" Threaded Rods, then secure NC Housing to Hat Channels (MF Metal Furring) using either Self-Drilling or Metal-Furring screws. Tighten M6 pan head screws to secure hanger bars.



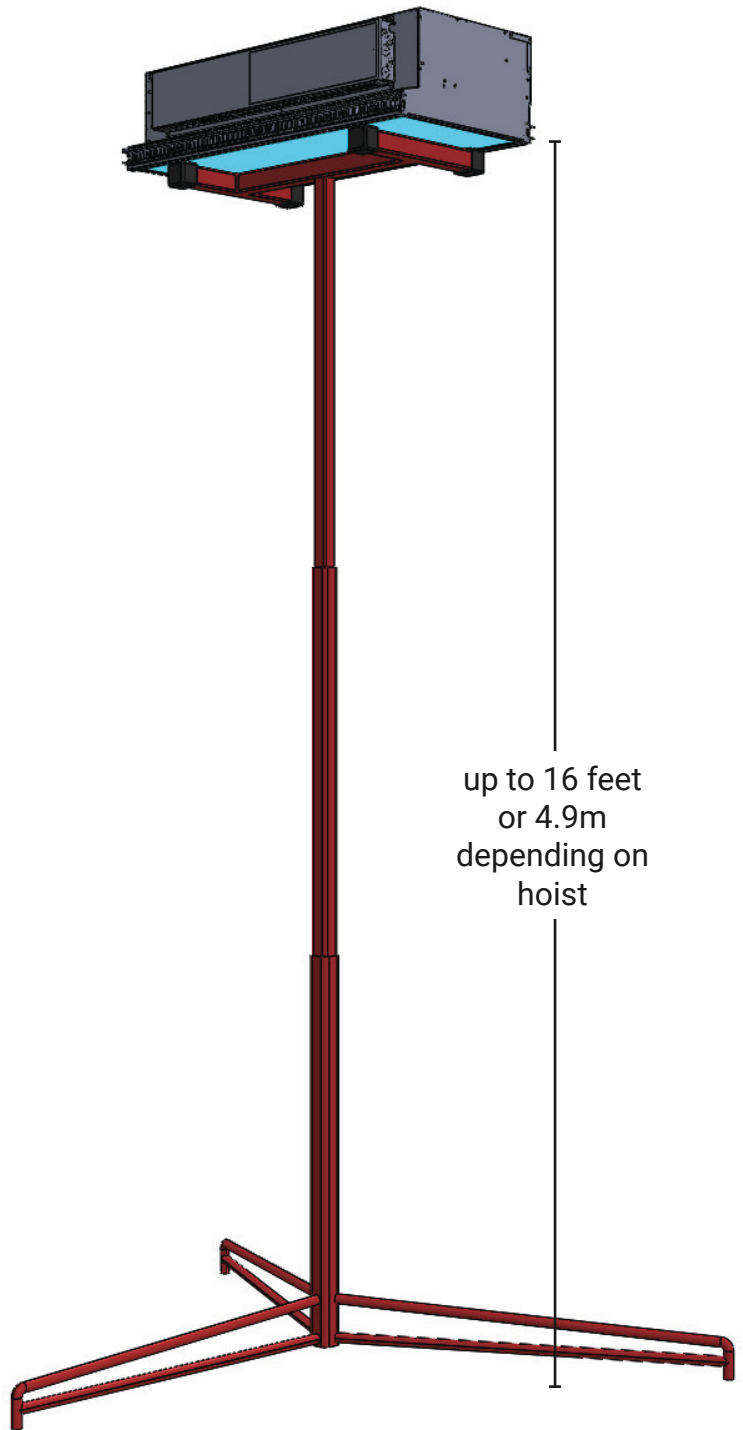
Carefully place lighting fixture on a Drywall hoist



Drywall Hoist or Plasterboard Lift typically available to for up to 16ft or 4.9m ceiling height

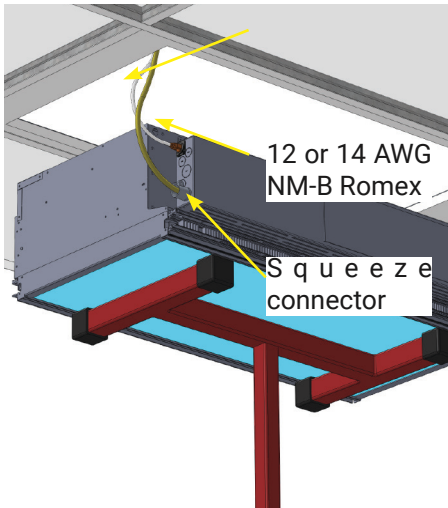
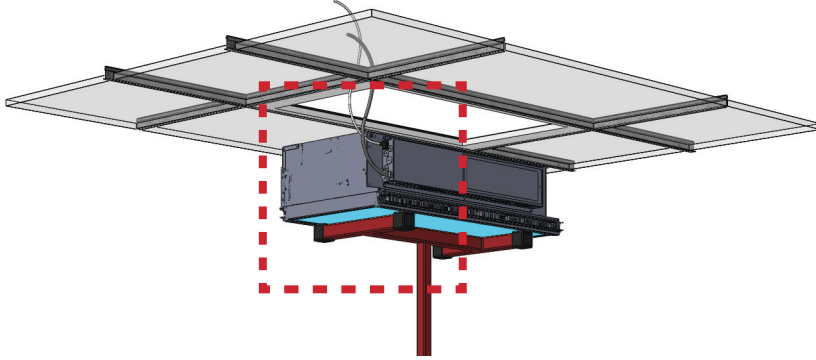


Ensure fixture is properly supported and resting on the metalwork and not the fragile glass parts. Do not remove blue protective film at this stage.

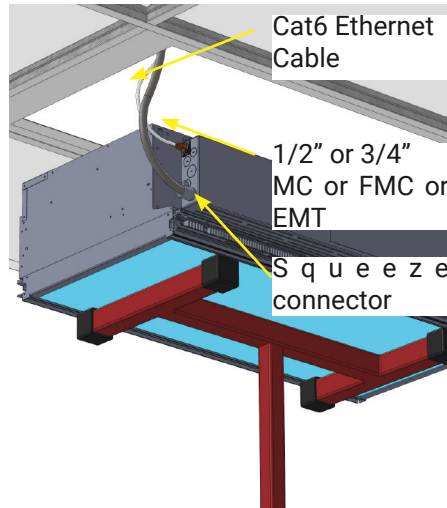


Slowly elevate to ceiling

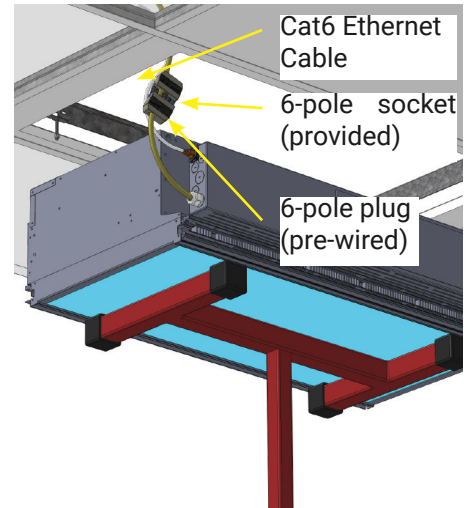
Make electrical and data connections before raising into the ceiling void



North American model: 12/2 or 12/4 or 14/2 or 14/4 WG NM-B Romex with 1/2" or 3/4" KO. Cat6 Ethernet cable

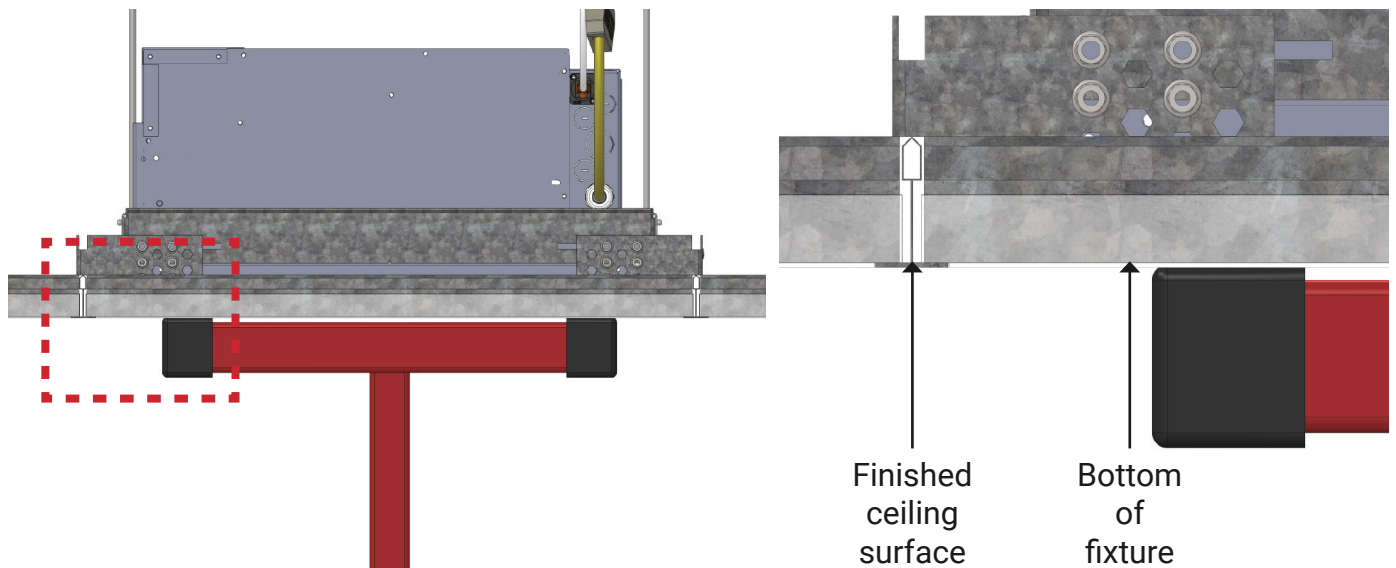


North American model: 12/2 or 12/4 or 14/4 or 14/4 WG MC or FMC or EMT with 1/2" or 3/4" KO. Cat6 Ethernet cable



International model: 3-core 2.5mm² LSZH or CPR-rated, cable OD 6.5-8.6mm, 6-pole socket. Cat6 Ethernet cable

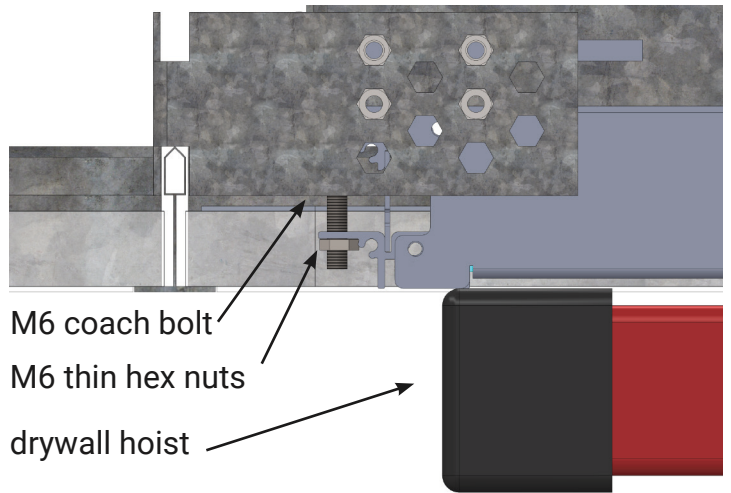
Raise fixture until the bottom of the fixture is level with the finished ceiling surface



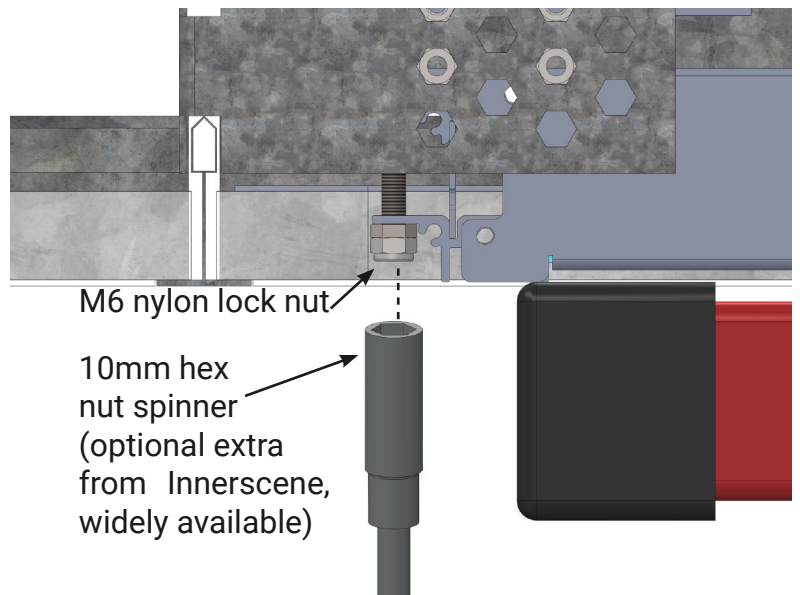
Use M6 thin hex nuts (provided) to adjust the level of the fixture to the NC (New Construction) Housing.

Gradually lower the drywall hoist to load the fixture on the hex nuts.

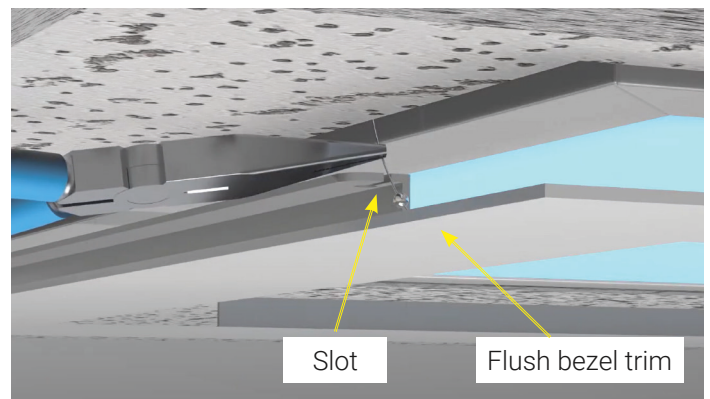
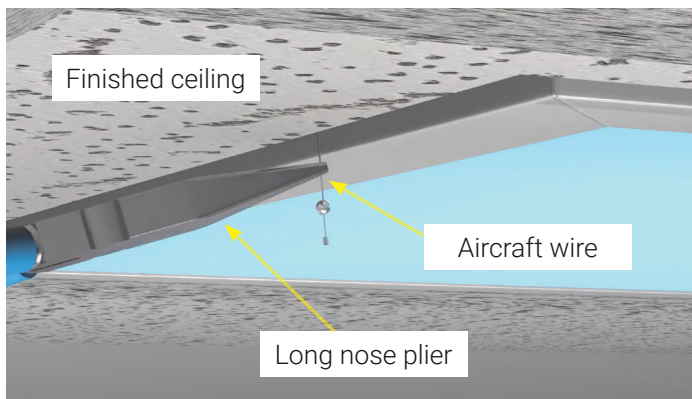
Use the optional 10mm hex nut spinner (nut driver / nut driver / nut screwdriver)
Do not use impact driver.



Use M6 nylon hex lock nuts (provided) to secure the fixture to the NC Housing. Ensure the fixture is secured on the ceiling before removing the drywall hoist.

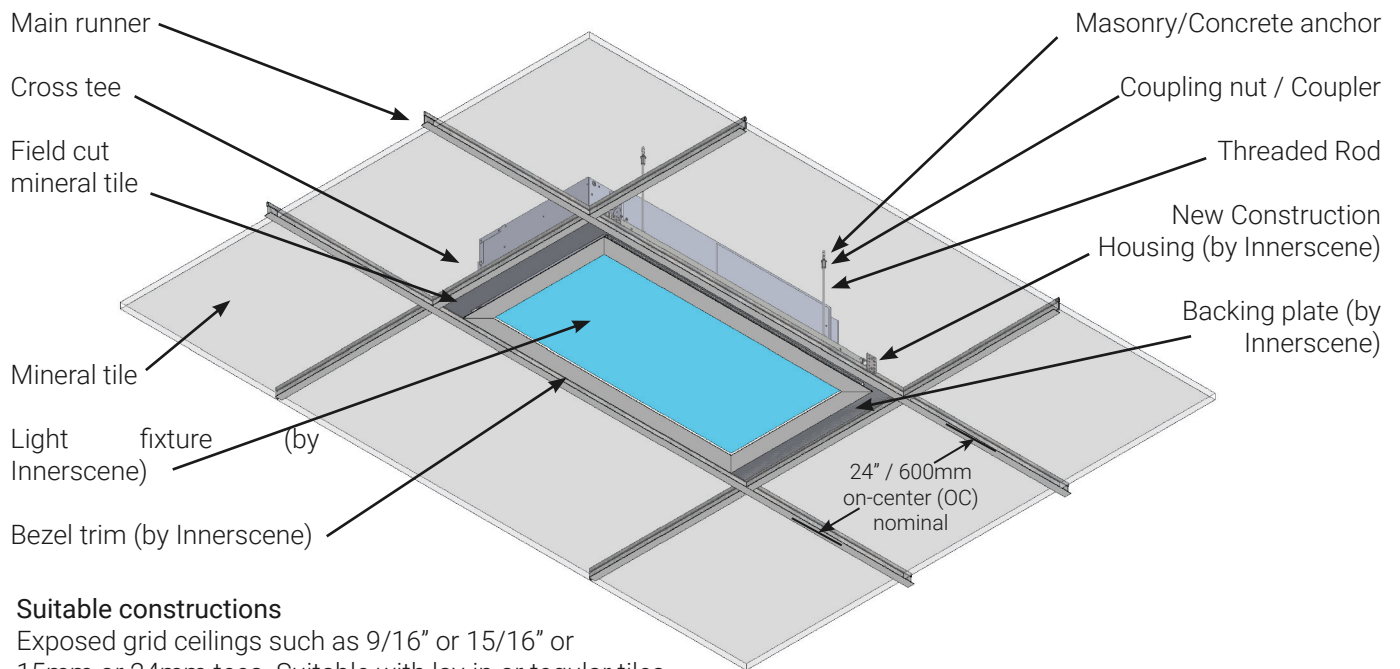


Once the ceiling has been finished. Using a long nose (needle nose) plier. Grab one of the four aircraft wires hanging from the fixture and pull it down and slot into the slots on the Bezel Trim. The wires are spring loaded and will pull up the trim.



Repeat on all four aircraft wires to complete

Universal mounting option suitable for remodelling/retrofit or new construction using grid ceilings with mineral tiles



Suitable constructions

Exposed grid ceilings such as 9/16" or 15/16" or 15mm or 24mm tees. Suitable with lay-in or tegular tiles

When using mineral tiles, additional Innerscene Backing Plate is required to ensure integrity of field cut tiles

Recommended equipment for ceilings below 15 feet or 4.5m: (For taller ceilings, temporary support structures or lifts may be required)

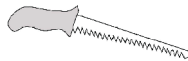
Drywall panel hoist
11feet or 15feet



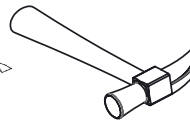
Metal furring or self drilling screws and power drill



Drywall saw



Hammer



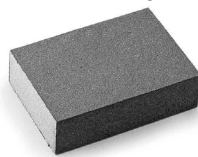
Wire stripper or cutter



Contact adhesive spray



Coarse sanding block



M6 Masonry anchors or 1/4"-20 steel stud anchors



8x M6 or 1/4"-20 thin nuts
e.g. McPrimary-Carr 91078A029



4x M6 or 1/4"-20 coupler
e.g. McPrimary-Carr 90264A435



4x M6 or 1/4"-20 nylon locknuts
e.g. McPrimary-Carr 90566A029



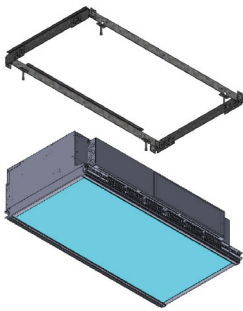
4x M6 or 1/4"-20 threaded rods
e.g. McPrimary-Carr 95475A550



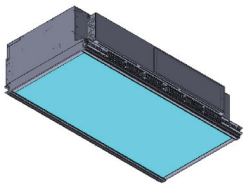
Hex nut spinner



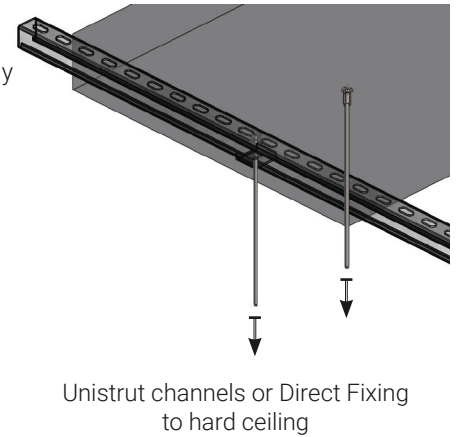
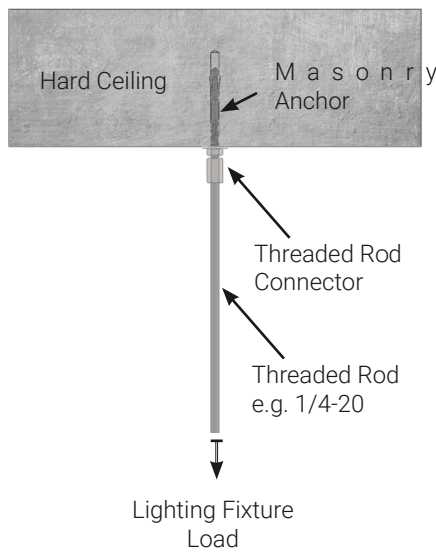
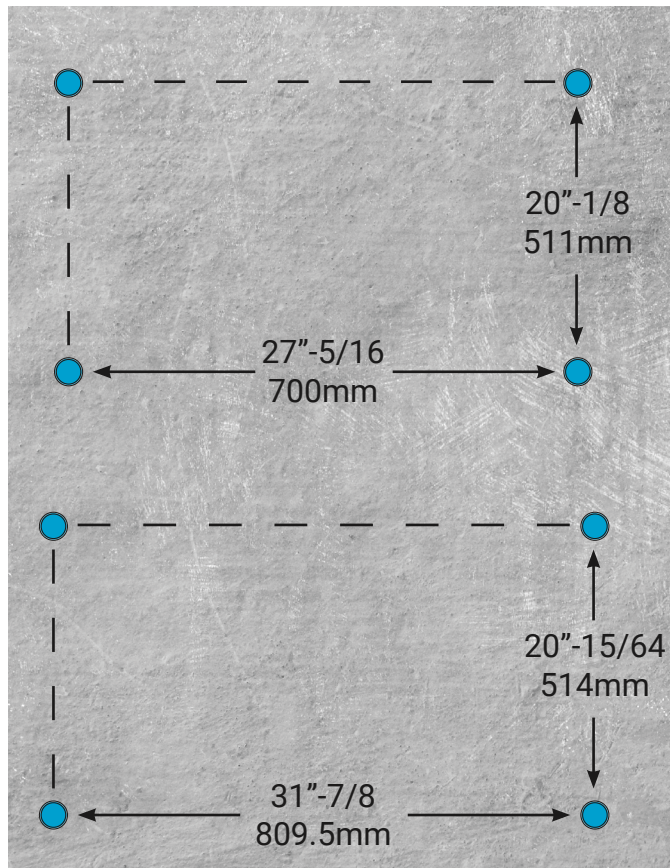
Install anchors at set locations or supporting channels



Fixing Locations on Hard Ceiling with NC Housing



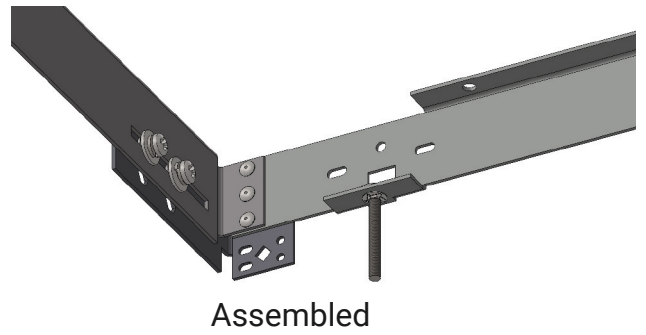
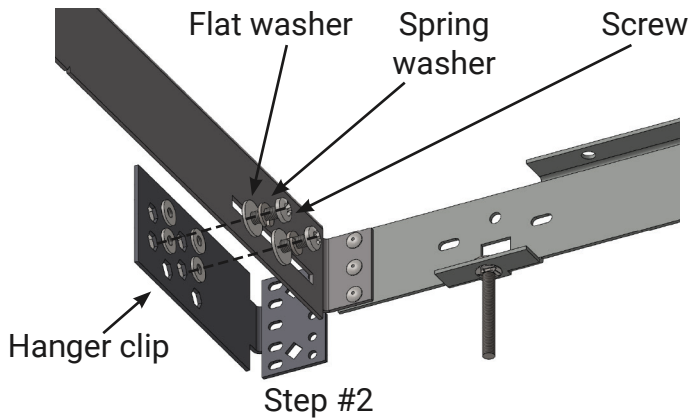
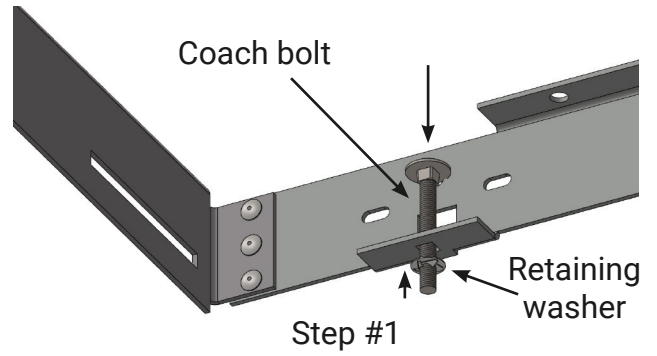
Fixing Locations on Hard Ceiling without NC Housing



Prepare the New Construction (NC) Housing at ground level. Secure the four coach bolts with the retaining washers (Step #1). Then loosely screwing in the four hanger clips (Step #2).

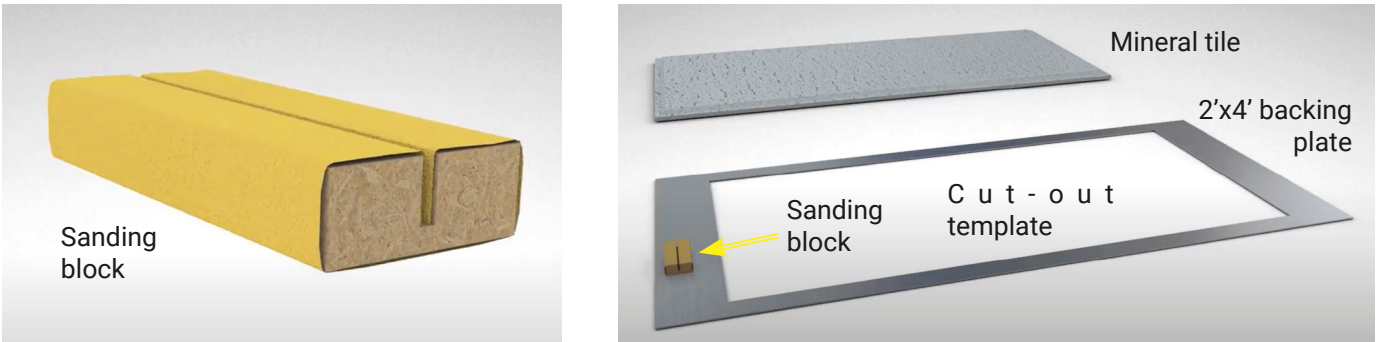


New Construction (NC) Housing



For mineral tile grid ceilings, or ceilings with relatively weak or thin constructions, an optional backing plate may be supplied by Innerscene to support the ceiling panel or tile material to allow for field cutting. This is highly recommended when using 2' x 4' mineral tiles. One backing plate is required per fixture.

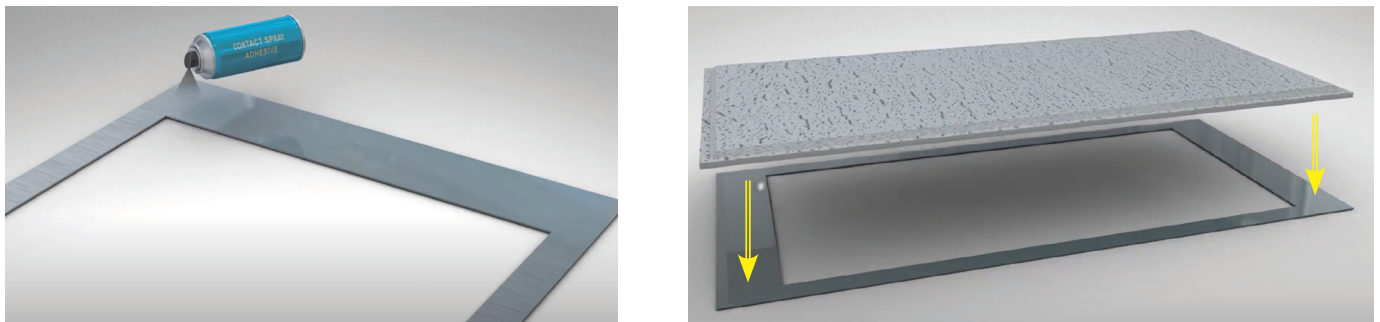
Using a coarse sanding block or wire wool or abrasive sander, apply a rough texture along an entire one side of the aluminium backing plate.



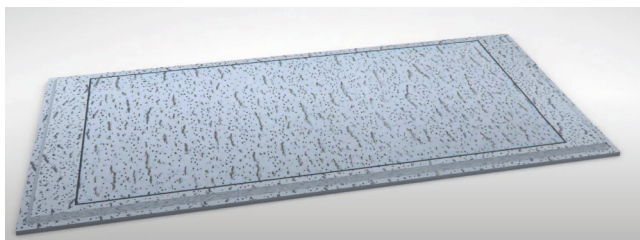
Clean the back surface of the mineral tile (or similar ceiling medium that requires support) of debris.

Wear a mask, gloves and ventilation masks when working with adhesives. Follow the recommended instruction of your spray-on contact adhesives.

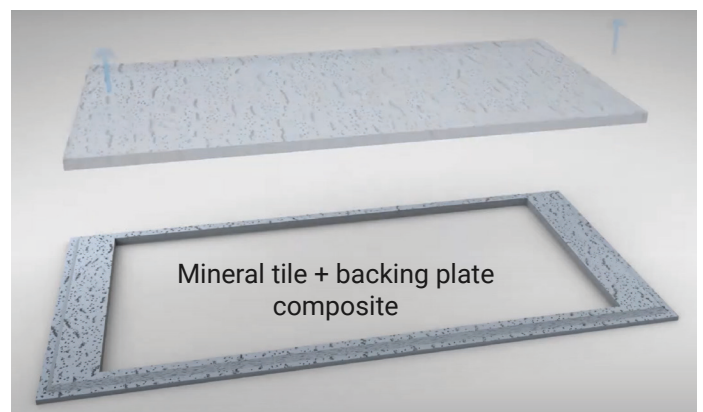
Spray contact adhesives to the coarse face of the backing plate as well as the back of the mineral tile. Wait several minutes (depending on contact adhesive's manufacturer's recommendations) for the contact adhesives to dry slightly.



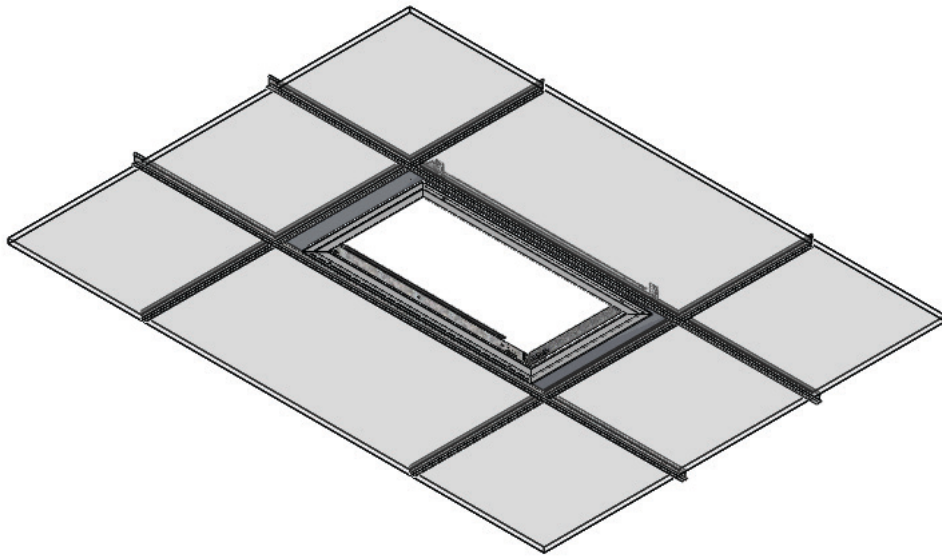
Align the mineral tile with the backing plate. Apply uniform pressure on the two surfaces to adhere them. Start at the centre and work outwards. Allow time for the contact adhesive to cure. Using a drywall knife, cut the inside



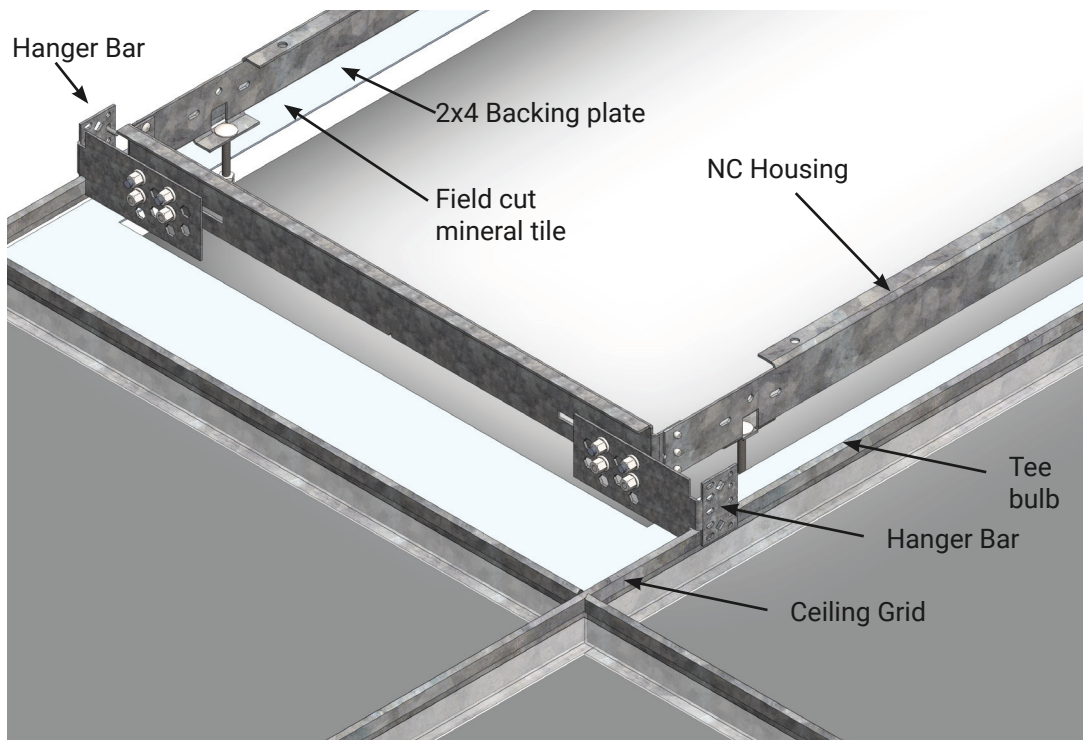
Drywall knife



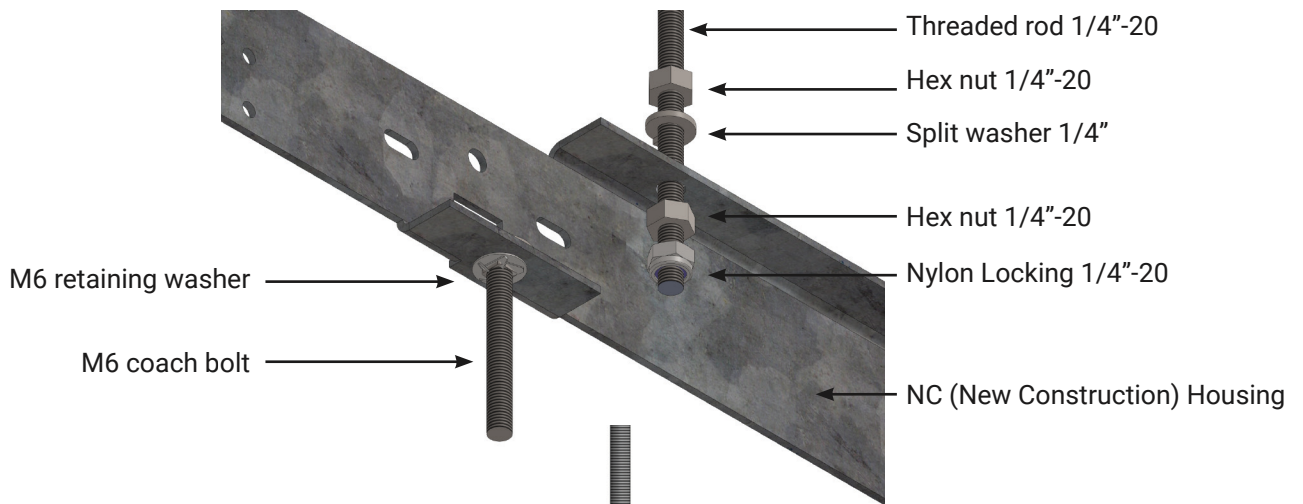
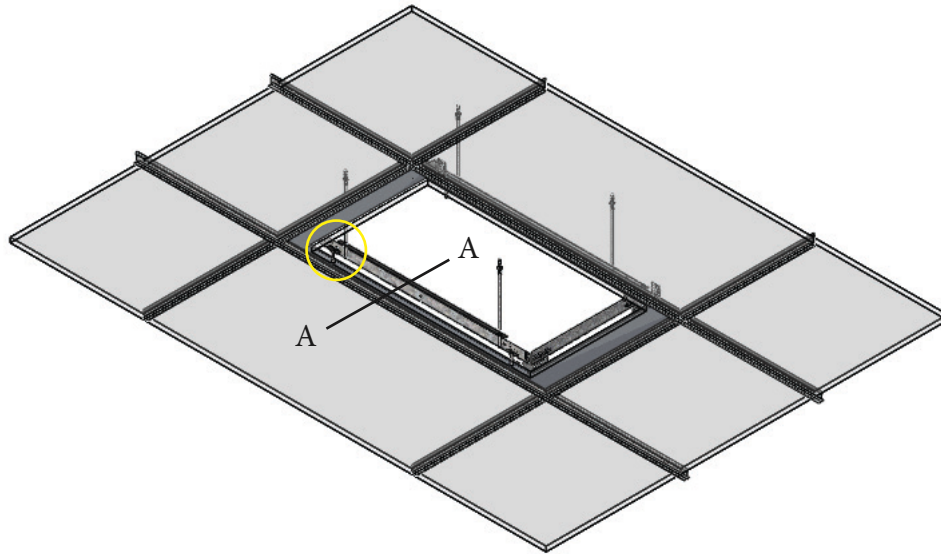
Lay in composite tile and NC Housing on Ceiling Grid



Extend the hanger bars over the bulb on the main beams

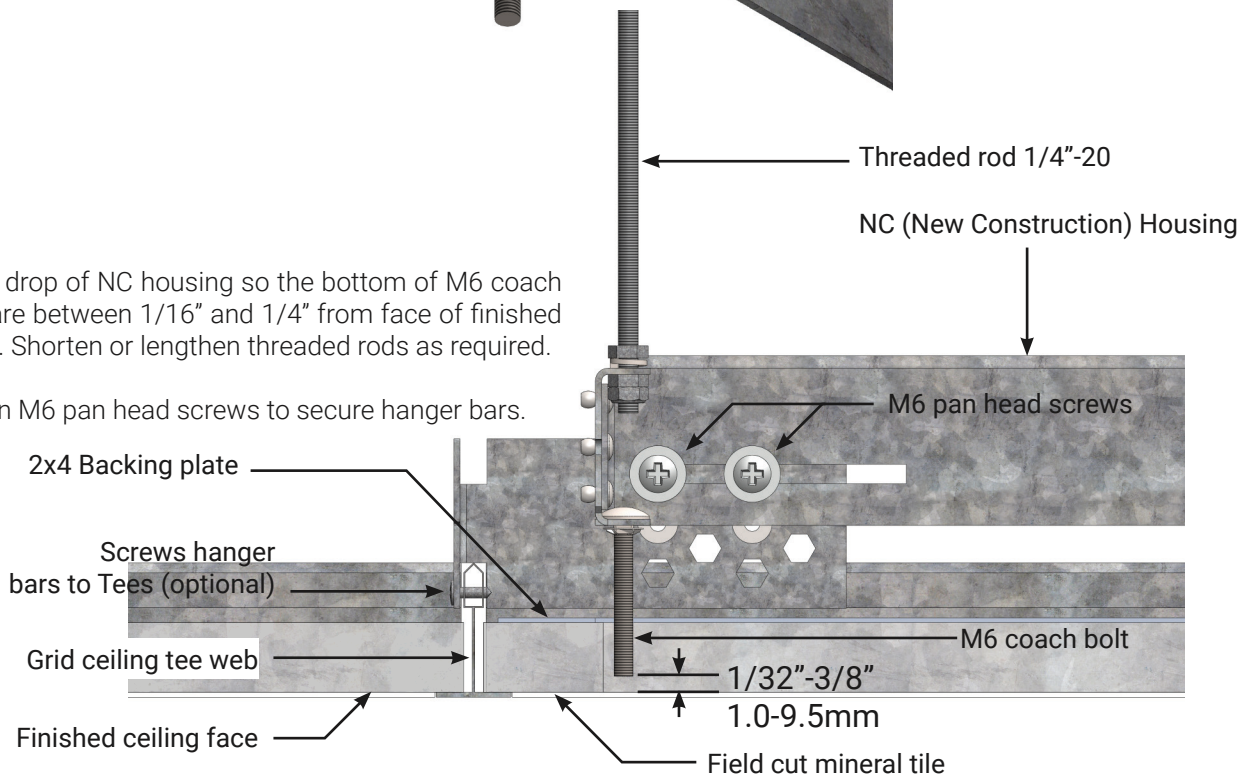


Secure threaded rods to New Construction (NC) Housing



Adjust drop of NC housing so the bottom of M6 coach bolts are between 1/16" and 1/4" from face of finished ceiling. Shorten or lengthen threaded rods as required.

Tighten M6 pan head screws to secure hanger bars.



Cross section A-A

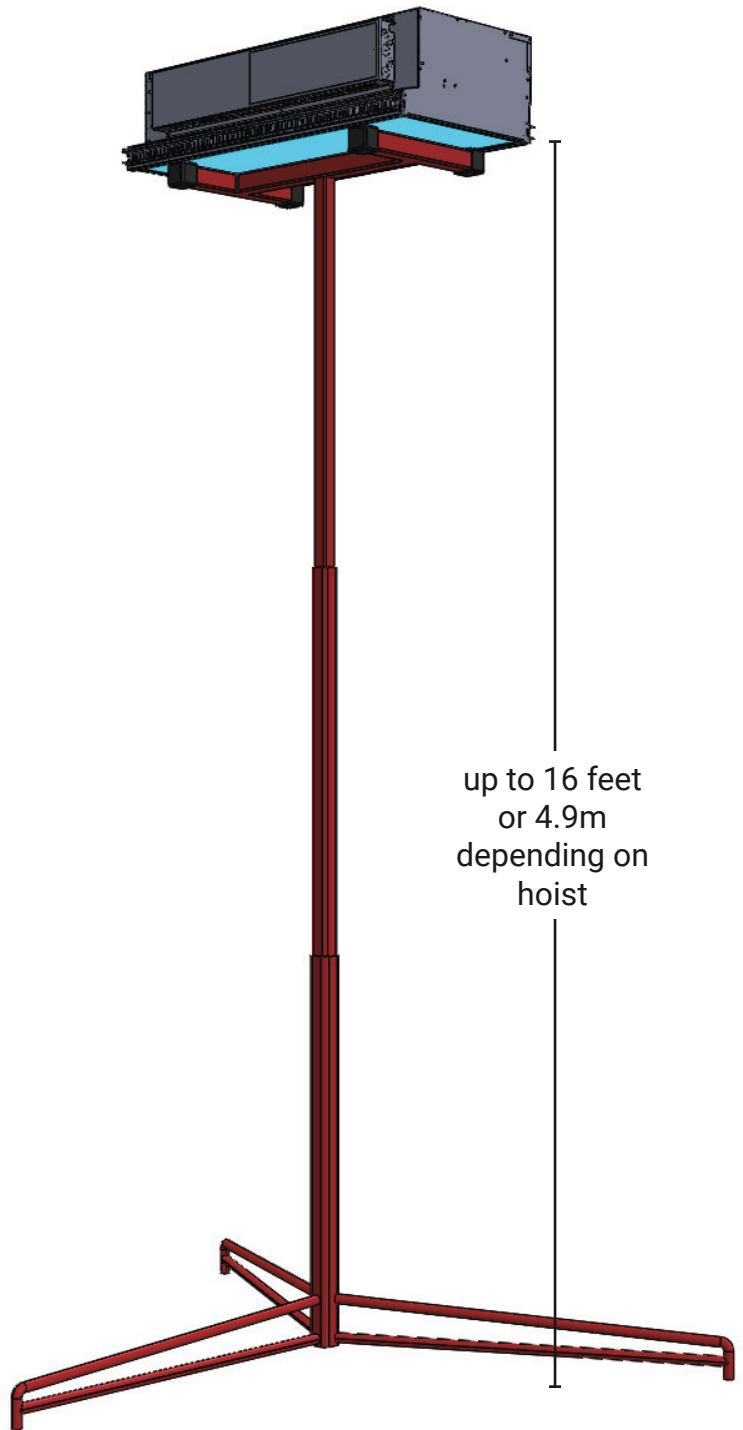
Carefully place lighting fixture on a Drywall hoist



Drywall Hoist or Plasterboard Lift typically available to for up to 16ft or 4.9m ceiling height



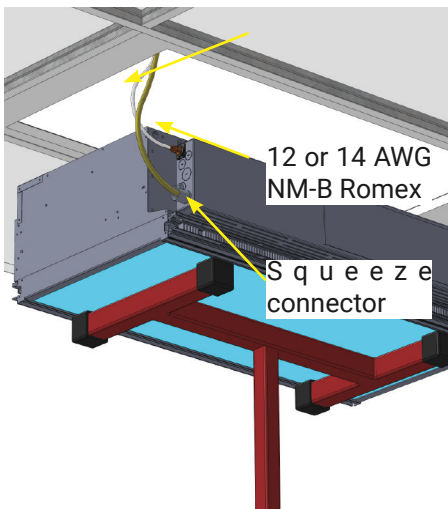
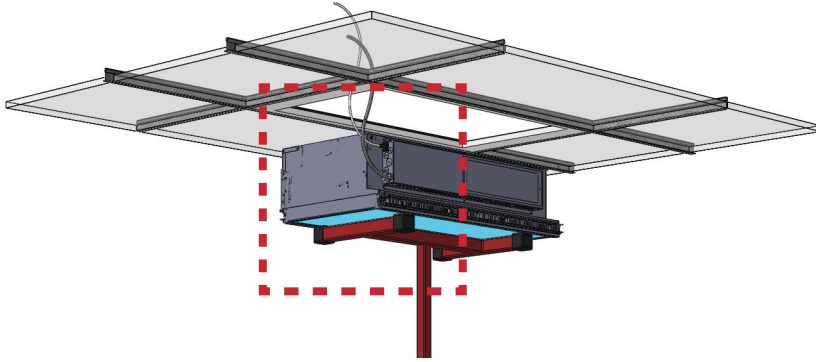
Ensure fixture is properly supported and resting on the metalwork and not the fragile glass parts. Do not remove blue protective film at this stage.



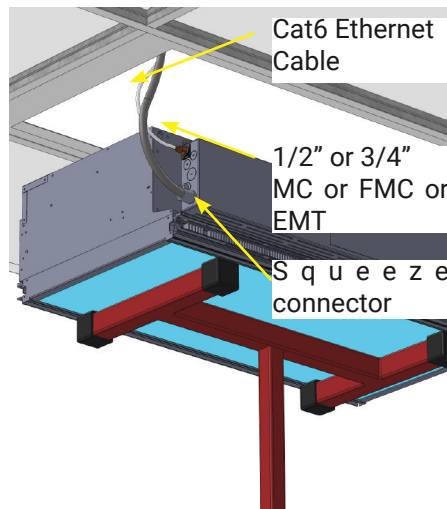
up to 16 feet or 4.9m depending on hoist

Slowly elevate to ceiling

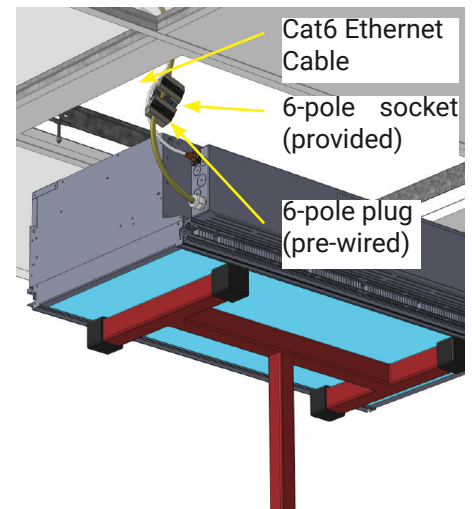
Make electrical and data connections before raising into the ceiling void



North American model: 12/2 or 12/4 or 14/2 or 14/4 WG NM-B Romex with 1/2" or 3/4" KO. Cat6 Ethernet cable

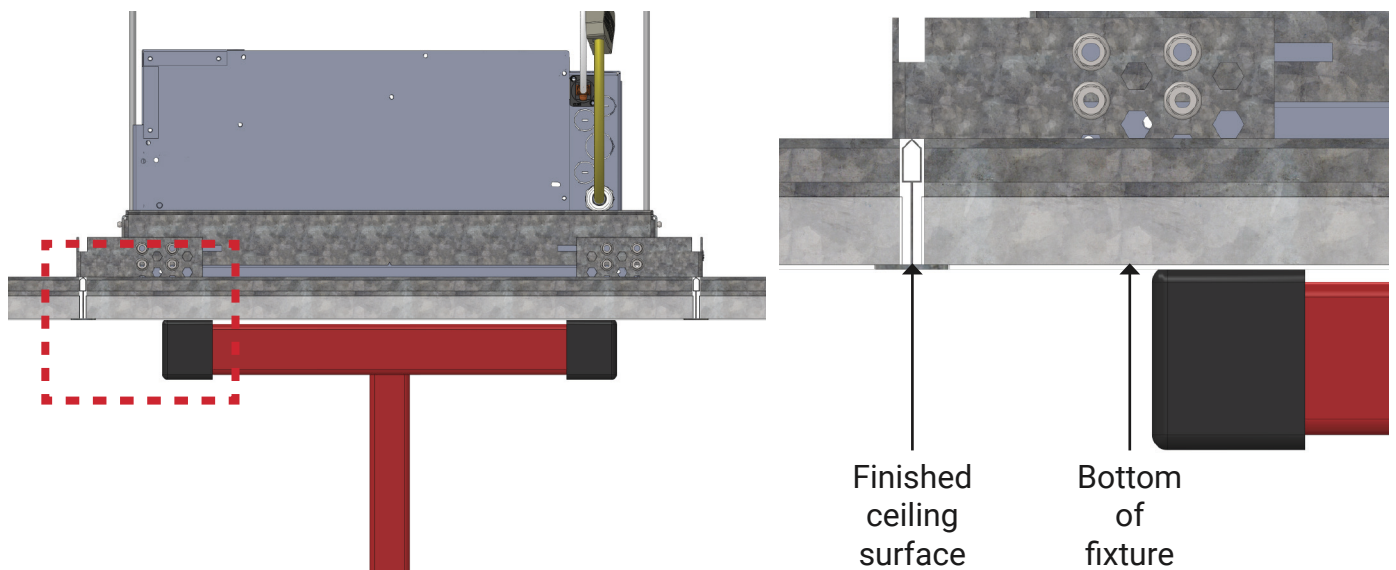


North American model: 12/2 or 12/4 or 14/4 or 14/4 WG MC or FMC or EMT with 1/2" or 3/4" KO. Cat6 Ethernet cable



International model: 3-core 2.5mm² LSZH or CPR-rated, cable OD 6.5-8.6mm, 6-pole socket. Cat6 Ethernet cable

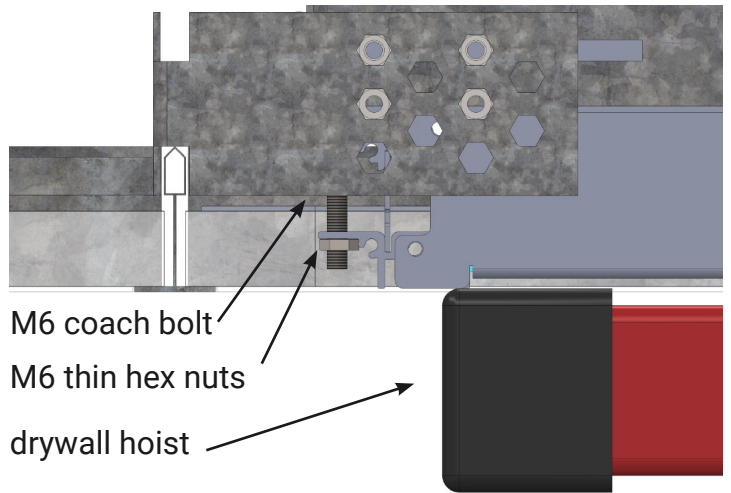
Raise fixture until the bottom of the fixture is level with the finished ceiling surface



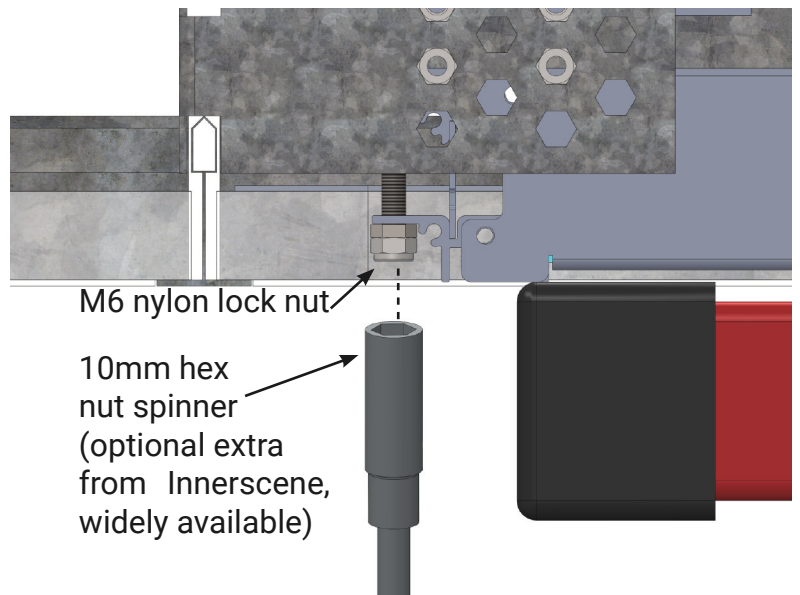
Use M6 thin hex nuts (provided) to adjust the level of the fixture to the NC (New Construction) Housing.

Gradually lower the drywall hoist to load the fixture on the hex nuts.

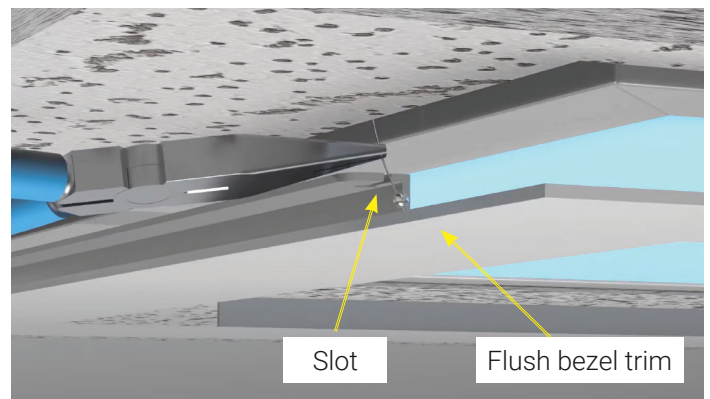
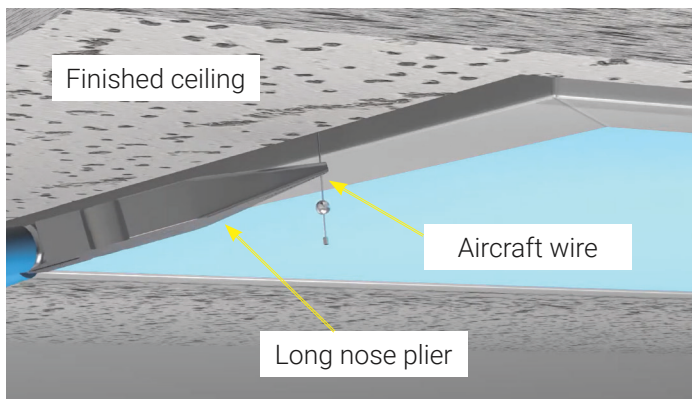
Use the optional 10mm hex nut spinner (nut driver / nut driver / nut screwdriver)
Do not use impact driver.



Use M6 nylon hex lock nuts (provided) to secure the fixture to the NC Housing. Ensure the fixture is secured on the ceiling before removing the drywall hoist.



Once the ceiling has been finished. Using a long nose (needle nose) plier. Grab one of the four aircraft wires hanging from the fixture and pull it down and slot into the slots on the Bezel Trim. The wires are spring loaded and will pull up the trim.



Repeat on all four aircraft wires to complete

A7 units outer surface is glass which has an anti-reflective optical coating typically found on camera lenses and eye glasses. This optical coating can be damaged if chemicals or abrasive cloths are used to clean the surface.

Do not use:

Glass or material cleaners
Abrasive cloths

Do use:

Isopropyl alcohol (preferred) or soapy water
Microfiber cloths

If in doubt, follow instructions for cleaning camera lenses and eyeglasses



Recommended Presets and Circadian Animations

Innerscene recommends several presets which would suit a majority of uses:

Summer Mediterranean blue sky

This preset presents a bright blue sky with bright sun beam.

DALI or Casambi CCT set to 6500K. Brightness set between 50% and 100% depending on the desired effect. Lower lighting levels may be more suitable in large array of light fixtures may be too bright. Actual CCT is around 17,000K.

Sunrise or Sunset

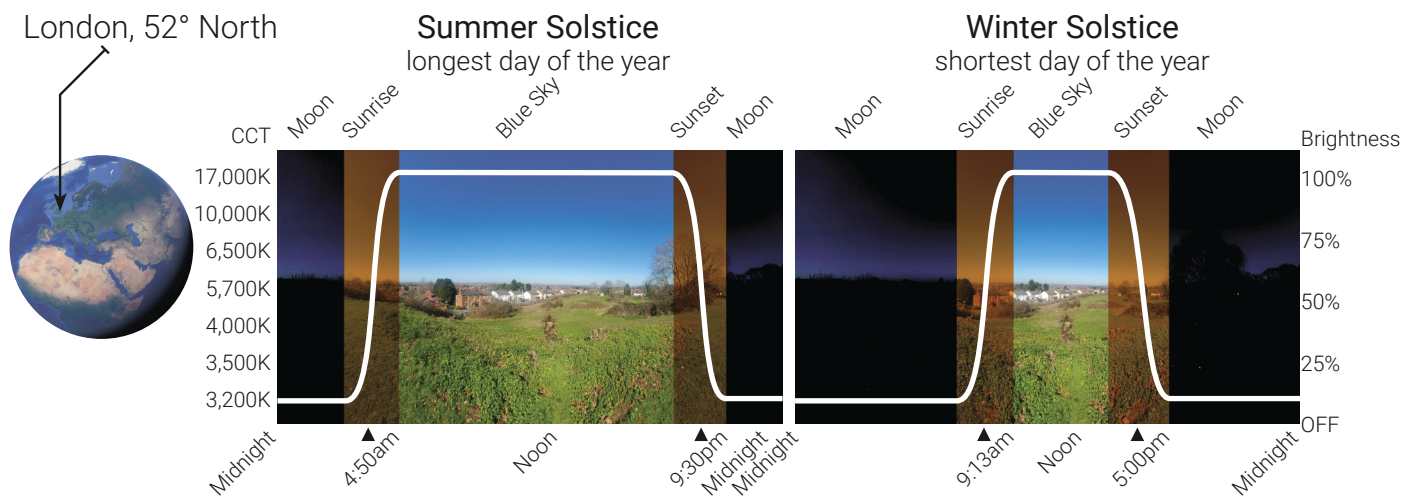
DALI or Casambi CCT set to 2700K. Brightness set between 30% and 80%. Actual CCT is around 3200K.

Moon

DALI or Casambi CCT 2700K. Brightness set between 1% and 7%. Actual CCT is around 3200K.

Seasonal circadian

The virtual sky colour and brightness approximates to real world with local sunrise and sunset cycles that varies throughout the year. Please note that during winter, the daylight hours will reflect the outside condition which may mean there is insufficient task lighting during typical working hours such as 9am to 5pm. This mode is not recommended for very high latitudes such as North Finland or Canada where there may be perpetual daylight or darkness. See below for comparison of between summer and winter days for projects located in London or similar latitudes.



Perennial circadian

The sky colour and brightness profile will be based on local time, regardless of seasonal changes. This mode is more suitable to rooms which may be used for work such as meeting rooms, offices, home offices etc. During typical working hours of 8am and 6pm, the sky will be fully blue. This may alleviate symptoms of Seasonal Affective Disorder (SAD) by increasing the exposure to light.



Thank you for purchasing the Innerscene Virtual Sky fixture with Casambi lighting control. Casambi ecosystem typically consist of a Casambi Dimming module which controls the fixtures, as well as a battery powered Casambi Xpress wall or handheld controller. For wiring or mounting instructions please refer to "Wiring Guide" and "Installation Guide", respectively.

Innerscene Virtual Sun

tunable sky light fixture



Casambi CBU-A2D module

mains powered (inside Primary fixture except in North America)



Casambi Xpress

battery powered controller, optional wall mounting



Wireless Router

Required to connect multiple fixtures together.



Ethernet Switch

Optional for installations with more than four fixtures. Multiple switches may be required for even larger installations.



Android or Apple Phone or Tablet

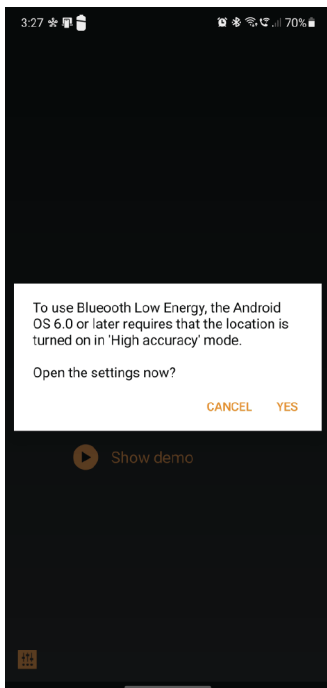
Required to set time or adjust scenes or preset buttons on Xpress controller



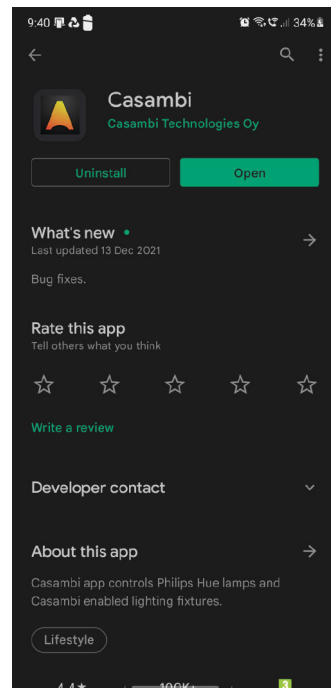
Casambi Xpress controllers are battery powered and do not consume power during standby. Up to four preset scenes can be triggered with buttons numbered 1 to 4. The default settings are:

Button 1 - Blue Sky
 Button 2 - Warm Sky
 Button 3 - Circadian
 Button 4 - Moon

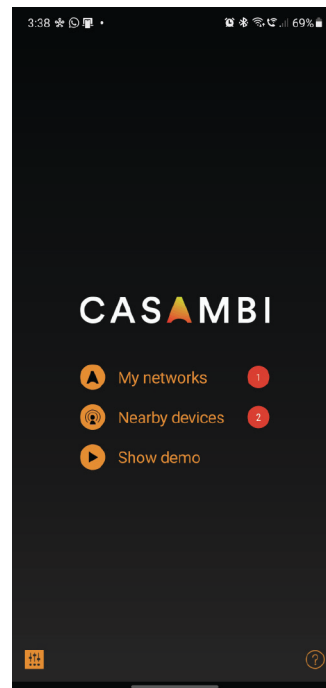
+ button increase brightness.
 - button decrease brightness
 Λ button warmer sky
 v button bluer sky



1) Ensure Bluetooth and Location Services are turned on in your device.



2) Open the Casambi App

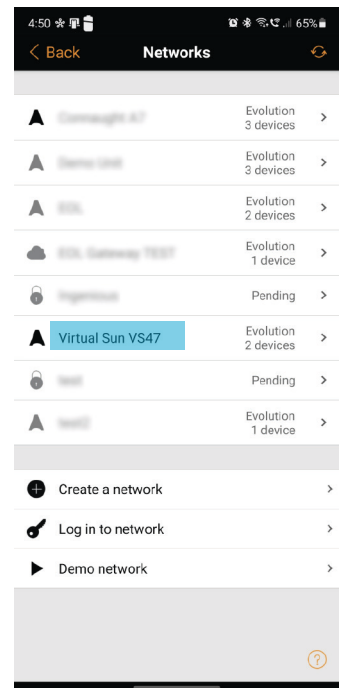


3) If the light fixtures are powered, the app should show **My networks** and **Nearby devices**.

By default, Innerscene pre-programmed Casambi modules are assigned to a Network which allow our customers to select the scenes and adjust colour and brightness.

If you require changes to the preset scenes, please contact support@innerscene.com for the Network password.

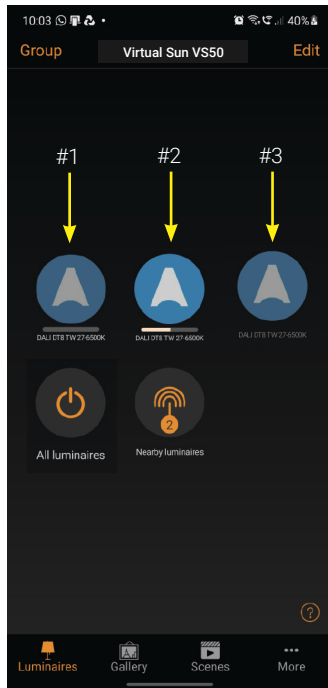
If you are installing Innerscene fixtures with other Casambi devices such as motion sensors, or other vendor's fixtures, please inform Innerscene and we will not program the Casambi module. You will need to Create a new Network yourself.



4) Select "My networks" to show your nearby networks or your existing networks. Active networks will show up in Black instead of Grey.

Select your network. Typically it will be named with the prefix "Virtual Sun".

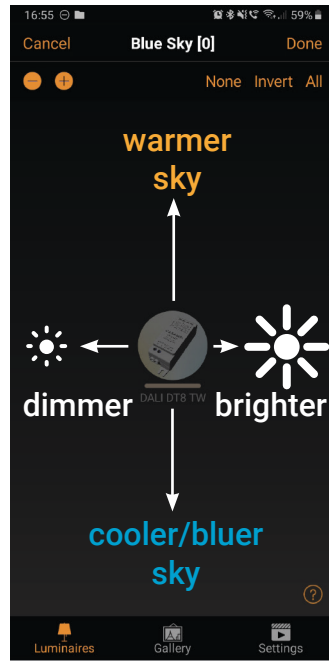
How to log into existing Casambi network



1) Once a network has been selected. You can turn on and off individual devices. Each device represents a zone of Innerscene Virtual Sun fixtures.

Active zones are highlighted (#2). The lit length of the bar underneath the icon represents the dimming level of that zone. For example the above represents 50% dimming. Inactive but powered zones are dimmed and with a grey bar underneath the icon (#1). Unpowered zones are dimmed and without a bar underneath the icon (#3).

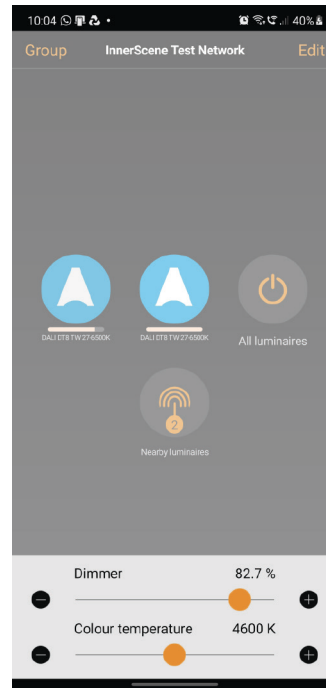
With Casambi, "off" is only by software and the fixture is still energised. For maintenance or servicing, please disconnect the system at the electrical box.



2) In the Luminaires screen, press on any fixture to turn it on and off.

Press and slide up and down to control the colour temperature. (Other vendor's fixtures may not support this feature)

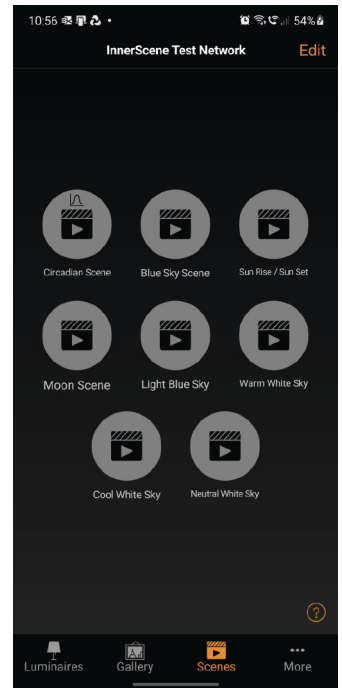
Press and slide left and right to control the brightness.



3) Press and Hold a zone will enable the tunable white menu. This will allow you to set the dimming percentage % and Colour temperature in Kelvin.

You can quickly adjust with the slider or make small increments with the + or - buttons.

This value will be kept until the fixtures are powered off or another scene preset is selected.



4) On the Scenes tab, you can see previously set scenes. With one Xpress controller, four of these scenes can be selected.

Circadian Scene - Sky colour slowly fades throughout the day, ranging from warm in the morning and late afternoon to cooler and bluer around noon.

Bright Blue Sky Scene - Bright blue sky.

Bright Sunrise/Sunset - Very warm sky similar to the an orange horizon at sunrise or sunset.

Moon Scene - A moon is visible and the sky is dimming to match low level moonlight.

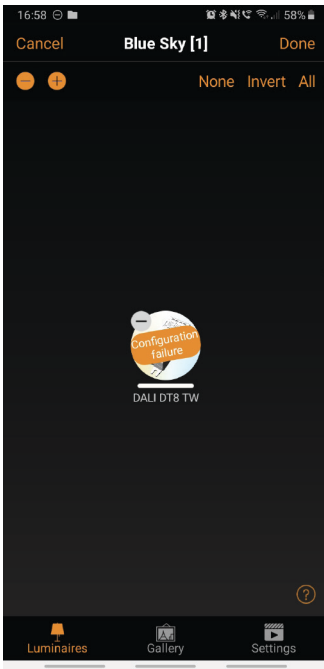
Dimmed Blue Sky Scene - Dimmed down blue sky

Warm White Sky - A less saturated warm sky, similar to 2700K or 3000K warm white LEDs.

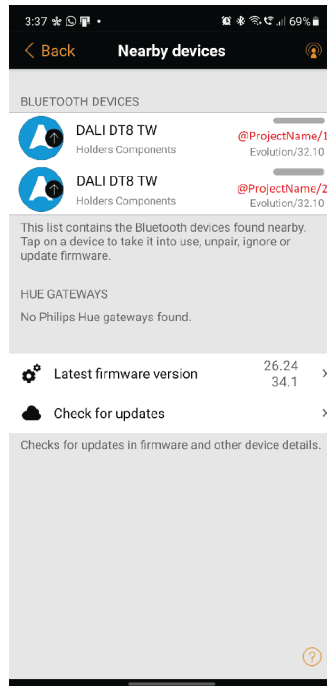
Neutral White Sky - An uncoloured white sky. Similar to 3500-4000K neutral white LEDs.

Cool White Sky - A pure white sky. Similar to 6500K cool white LEDs.

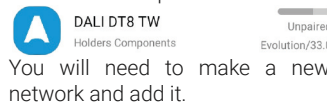
By default. Circadian, Blue Sky, Sunrise/Sunset, Neutral White Sky and Moon are pre-programmed. If you would like to have a particular set of scenes pre-programmed onto the controller, please instruct our sales team when placing your order.



1) "Configuration failure" most often result from the dimming control wires not being connected properly to the fixture. Disconnect then Reconnect the fixture from mains power to reinitialise. If the problem persist, disconnect the fixture from mains power and check the wire connections between Casambi DALI output (labelled DALI+ and DALI-) and DALI input on the A7 Controller board (labelled DALI x and DALI y). It is possible that the wires may have become loose during transit or installation.



2) Each light fixture group or zone is controlled by a single Casambi module, often labelled as "DALI DT8 TW" or "Innerscene A7" in the nearby devices list. The grey bar next to the bluetooth device represents the connection signal strength from your device to the Casambi module. If the device have not been previously setup it will show as "unpaired".

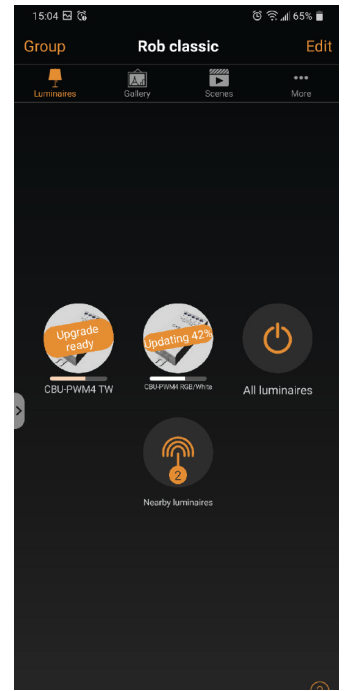


You will need to make a new network and add it.



3) The Casambi Xpress controller doesn't work

If you see a flash of amber light when pressing the controller that means it has battery. If not, then the battery may need to be replaced. Casambi Xpress uses a CR 2430 Lithium battery.



4) Device requires firmware upgrade.

Occasionally Casambi will require you to update the firmware of the network. Without the latest firmware the network may stop functioning.

In some cases you may need to request the network password from Innerscene to update the firmware. For more information contact support@innerscene.com

To avoid this problem, you may wish to disable firmware update in **Settings, Performance Security** section of the app.

Version changes

Revision 0	25th July 2022	Revision 0
Revision 1	1st December 2022	Revision 1
Revision 2	11th January 2023	Amened Primary & Secondary to Primary & Secondary
Revision 3	25th January 2023	Changed template, improved test cabling instructions
Revision 4	26th January 2023	Correction with CR and AB corrections
Revision 5	16th June 2023	Amended DMX wiring page to remove mention of Casambi and Casambi image

