

# Modular Furniture System

Installation and Technical Information

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**Tools Required:**

- 13mm wrench
- 3mm hex screwdriver

**Notice to Installer:**

1. Ensure that mounting surface is level and lacking large imperfections before beginning installation. If there are large imperfections, condition surface so that modules can sit flush to the surface.
2. Avoid lifting modules with downward illumination by the glass lens, as doing so may crack it.
3. The BEGA Modular Furniture system uses 14 x 70mm expanding sleeve anchors and M14 shoulder screws to fasten modules to the finished surface. See next page for more information.

**Module Types:**

1. Start module: has a featureless surface (the “start”) and a “male” mating surface.
2. Middle module: has a “male” and “female” mounting surface.
3. End module: has a featureless surface (the “end”) and a “female” mating surface.

**Attaching Modules:**

1. Align “male” and “female” mounting surfaces. See Figure 1.

**NOTE:** Modules can be mated in the following configurations:

- Start to middle
- Middle to middle
- Middle to end
- Start to end

2. Line up the (4) 13mm mounting holes on each of the modules.
3. Insert 13mm hex head bolts and tighten in a cross pattern, ensuring that mounting surfaces sit flush. If there is any resistance when tightening bolts, verify that screw is seated correctly in threads and that mating surfaces are clean.

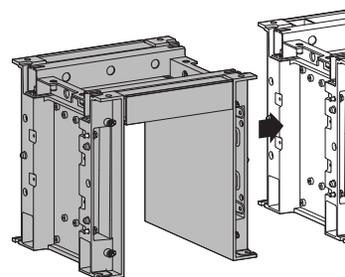
**NOTE:** make sure not to overtighten! Doing so may damage the painted surface.

4. Verify that modules do not shift when interacted with. If they do, tighten screws further until they do not.
5. Use 3mm hex screwdriver to tighten cup point screws until they are flush with the face of the cover door, making sure not to overtighten. See Figure 3.

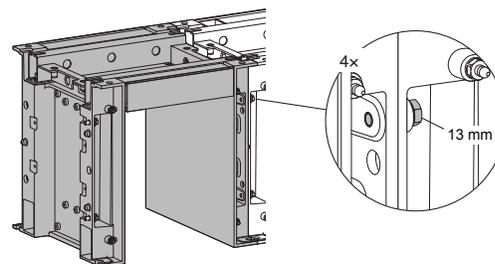
**NOTE:** the cover door should be the final item installed. Please ensure that all other modules and accessories are installed before proceeding with the next step.

6. Align cover door with space between modules and press on it until it clicks into place. See Figure 4.

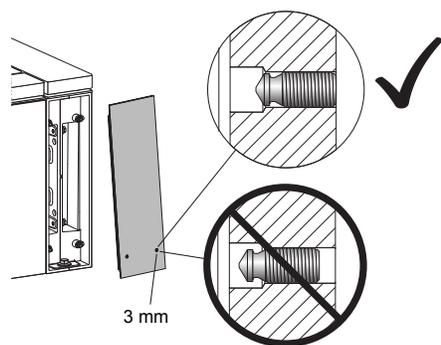
**Figure 1:**



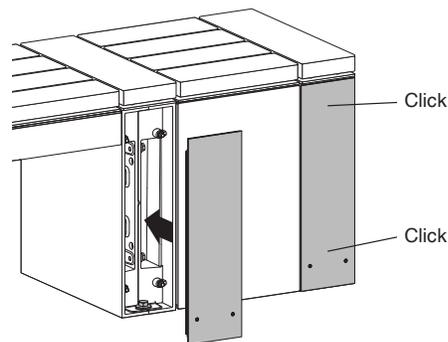
**Figure 2:**



**Figure 3:**



**Figure 4:**



**Tools Required:**

- 14mm drill bit
- 17mm wrench

**Notice to Installer:**

1. The BEGA Modular Furniture system uses 14 x 70mm expanding sleeve anchors and M14 shoulder bolts to fasten modules to the finished surface.
2. Ensure that mounting surface is level and lacking large imperfections before beginning installation. If there are large imperfections, condition surface so that modules can sit flush to the surface.
3. Avoid lifting modules with downward illumination by the glass lens, as doing so may crack it.

**Anchoring Modules:**

1. Place modular unit in final mounting location.
2. Mark the center of the mounting slots (for middle modules, mark the point at which the two modules meet). See Figure 1.

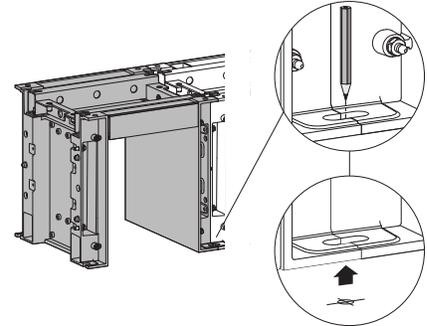
**NOTE:** each "leg" will have two slots - one fore and one aft.

3. Set aside the furniture modules to provide space for the following steps
4. Drill into the marked locations with a 14mm drill bit. See Figure 2.
5. Insert provided 14 x 70mm expanding sleeve anchor into each hole, ensuring that the lip sits flush with the finished surface. See Figure 3.
6. Place furniture modules in final mounting locations, lining the slots up with the anchors. See Figure 4.
7. Insert M14 self-tapping shoulder bolt into the expanding sleeve anchor and tighten. See Figure 5.

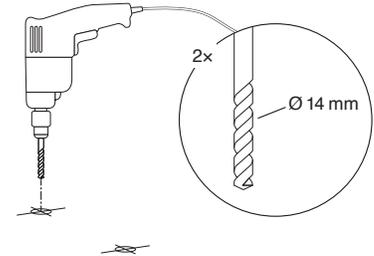
**NOTE:** make sure not to overtighten! Doing so may cause the concrete or modular unit to crack and may damage the painted surface.

8. Verify that modules do not shift when interacted with. If they do, tighten screws further until they do not.

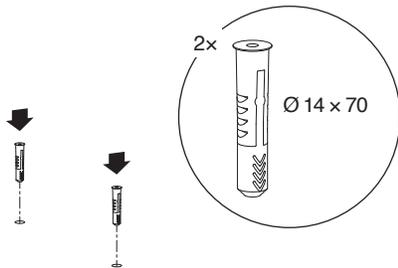
**Figure 1:**



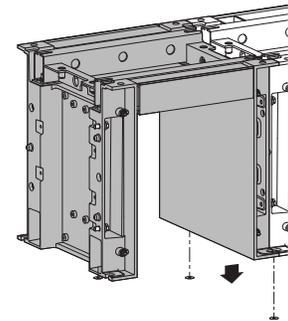
**Figure 2:**



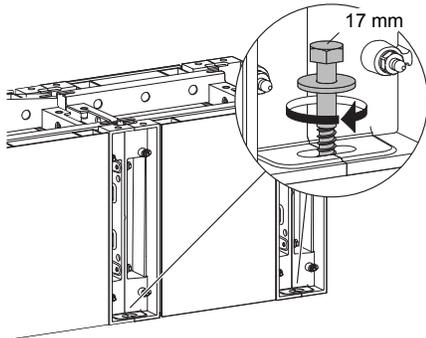
**Figure 3:**



**Figure 4:**



**Figure 5:**



**Tools Required:**

- 17mm wrench
- 13mm wrench
- 8mm hex screwdriver

**Notice to Installer:**

1. Ensure that mounting surfaces are free of any contaminants before proceeding, so that they may sit flush.
2. Avoid lifting modules with downward illumination by the glass lens, as doing so may crack it.

**Backrest Installation:**

1. Align backrest mount with holes on back side of seating module, ensuring that the mounting surfaces are clean and flush.
2. Insert the (6) provided bolts and washers and tighten using a 17mm wrench. See Figure 1 for a detail view.

**Seat Installation:**

1. Align seating surface mount with holes on upper side of seating module, ensuring that the mounting surfaces are clean and flush.
2. Use an 8mm hex screwdriver to tighten the (4) provided bolts and washers. See Figure 2 for a detail view.

**Armrest and Cover Plate Installation:**

**NOTE:** this step should be performed after all seat bolts are fastened and all wiring connections are made.

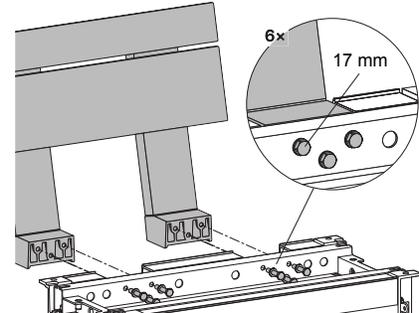
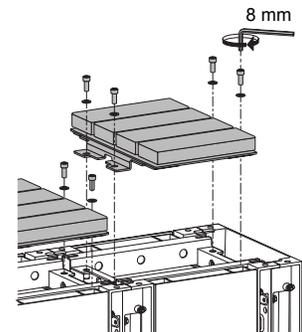
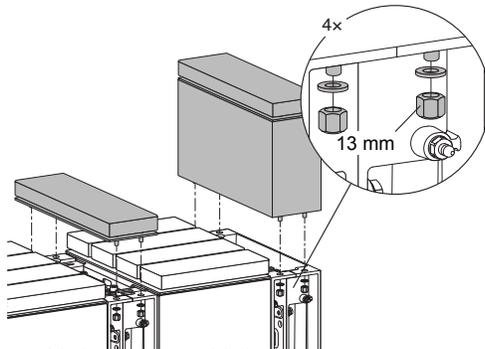
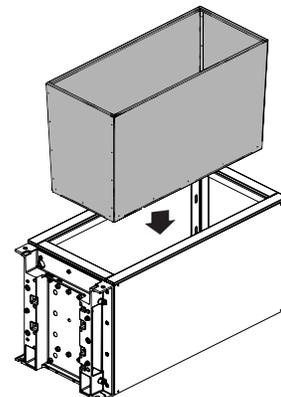
1. Align armrest with holes on upper side of seating module, ensuring that the mounting surfaces are clean and flush.
2. Gently lower the armrest/cover plate onto the seating module, so that the studs may go through the mounting holes.
3. Use a 13mm wrench to tighten the (4) provided nuts and washers. See Figure 3 for a detail view.

**NOTE:** caution must be exercised when lowering the armrest onto the seating module to avoid paint damage

**Planter Installation:**

1. Create provisions for drainage/irrigation below the planter module. The insert is provided with drainage holes in the base.
2. Align the provided insert above the planter box module and gently lower it into place. See Figure 4 for a detail view.
3. Verify that water follows the intended drainage path before placing any soil/plants into the module.

**NOTE:** it is recommended to only proceed with this step once the modular system is fully installed and in its final location, as the insert is heavy and will not be fastened to the outer module.

**Figure 1:****Figure 2:****Figure 3:****Figure 4:**

**Tools Required:**

- T20 Torx screwdriver
- T30 Torx screwdriver
- Phillips head screwdriver

**Notice to Installer:**

1. BEGA luminaires may be damaged if connected to conduit systems containing water. Article 300-5G of National Electric Code requires that "Conduits or raceways through which moisture may contact energized live parts shall be sealed or plugged at either or both ends."
2. 120-277 VAC input voltage.
3. Suitable for class 2 wiring.
4. Ensure that mounting surfaces are free of any contaminants before proceeding, so that they may sit flush.
5. Avoid lifting modules with downward illumination by the glass lens, as doing so may crack it.
6. Do not exceed rated wattage on the transformer. Internal circuit breaker will automatically shutdown if the total lamp wattage exceeds the rated maximum of 100W.
7. Use Figure 3 to estimate approximate max run length (ft) before voltage drop. Assume 16 AWG for provided BEGA connectors and extensions.

**NOTE:** installation of the driver box is the recommended first step, as wires will need to be routed through passageways into start module before installing accessories. Please see the following light fixture specific installation pages for more information.

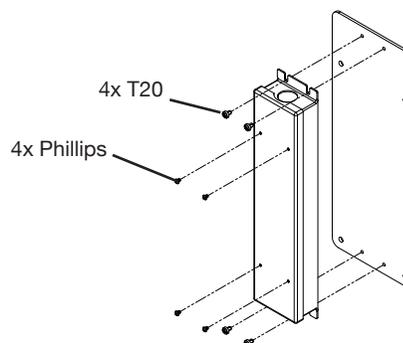
**Driver Box Installation:**

1. Attach driver box to adapter plate using (4) T20 screws. See Figure 1.
2. Align upper and lower driver box mount holes with corresponding mount holes on adapter plate.
3. Use T30 torx screwdriver to fasten driver box to module bracket using (2) included T30 screws. See Figure 2.

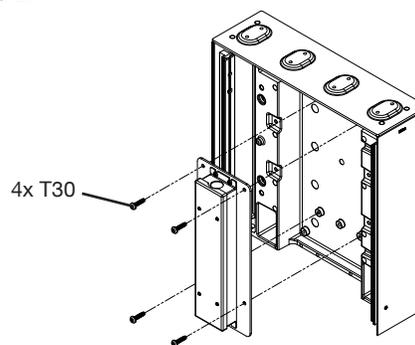
**Wiring Connections:**

1. Turn off main power before installation.
2. Loosen (4) phillips head screws shown in Figure 1 to remove the driver box cover plate.
3. Make 120V AC supply wiring connections inside the transformer:  
*MAIN VOLTAGE SUPPLY WIRE TO TRANSFORMER HOT (RED)*  
*NEUTRAL (COMMON) SUPPLY WIRE TO TRANSFORMER NEUTRAL (BLACK)*
4. If using DALI, make control system connections to green and white wires.
5. The 4-pin connector can then be routed to the first luminaire or extension cord (see next page for more information).

**Figure 1:**



**Figure 2:**



**Figure 3:**

		Total System Watts											
		5W	10W	15W	20W	30W	40W	50W	60W	70W	80W	90W	100W
Wire Size (AWG)	18	366	183	122	92	61	46	37	31	26	23	20	18
	16	585	293	195	146	98	73	59	49	42	37	33	29
	14	928	464	309	232	155	116	93	77	66	58	52	46
	12	1477	739	492	369	246	185	148	123	106	92	82	74
	10	2353	1177	784	588	392	294	235	196	168	147	131	118
	9	2953	1403	935	701	468	351	281	234	200	175	156	140
	8	3724	1769	1179	884	590	442	354	295	253	221	197	177
	Maximum run length (ft) before a 2V drop												

**Tools Required:**

- T10 Torx screwdriver

**Notice to Installer:**

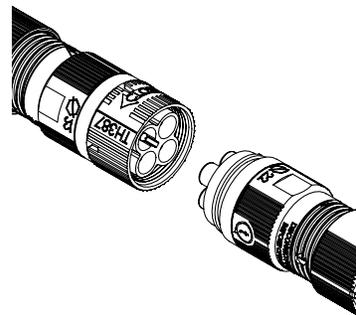
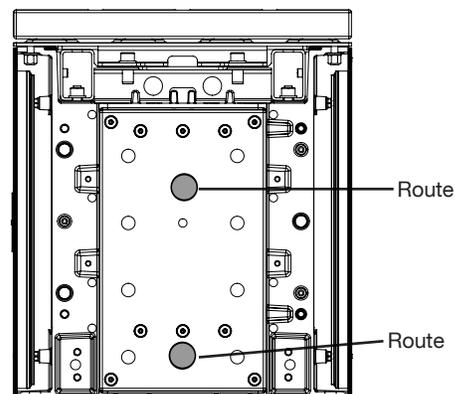
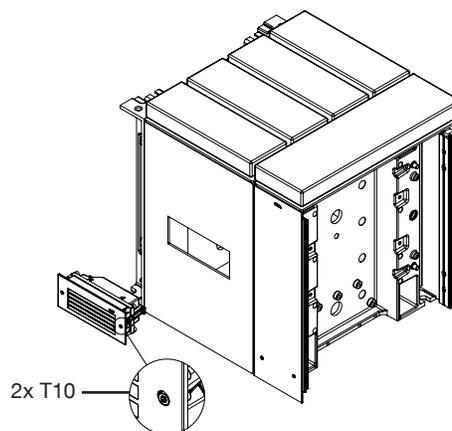
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2. 120-277 VAC input voltage.
3. Suitable for class 2 wiring.
4. Ensure that mounting surfaces are free of any contaminants before proceeding, so that they may sit flush.
5. Avoid lifting modules with downward illumination by the glass lens, as doing so may crack it.
6. Do not exceed rated wattage on the transformer. Internal circuit breaker will automatically shutdown if the total lamp wattage exceeds the rated maximum of 100W.

**Installation:**

1. Turn off main power before installation.
2. Connect 4-pin male connector to 4-pin female connector, as shown in Figure 1. If driver wire is not able to reach light module, an extension may be required. See product accessories for more information.
3. Before attaching seating surfaces or accessories, route wires through the holes in the detail view shown in Figure 2.

**Removal for Service:**

1. Disconnect 4-pin connectors.
2. Loosen (2) T10 screws on faceplate of recessed steplight to release screw clamps. See Figure 3.
3. The fixture can now be removed to allow internal components to be replaced.

**Figure 1:****Figure 2:****Figure 3:**

**Tools Required:**

- 5mm hex screwdriver

**Notice to Installer:**

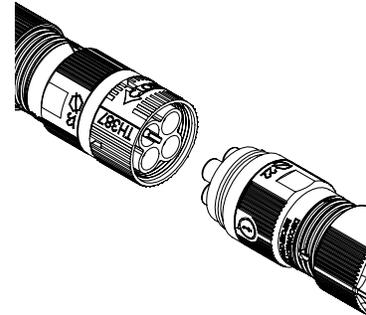
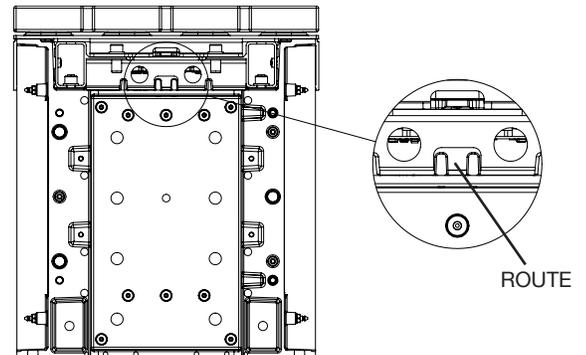
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**Installation:**

1. Turn off main power before installation.
2. Connect 4-pin male connector to 4-pin female connector, as shown in Figure 1. If driver wire is not able to reach light module, an extension may be required. See product accessories for more information.
3. Before attaching seating surfaces or accessories, route wires through the gap in the detail view shown in Figure 2.

**Removal for Service:**

1. Disconnect 4-pin connectors.
2. Loosen (4) 5mm hex screws on faceplate of recessed downlight, taking care not to let the faceplate fall when loose. See Figure 3.
3. The fixture can now be removed to allow internal components to be replaced.

**Figure 1:****Figure 2:****Figure 3:**