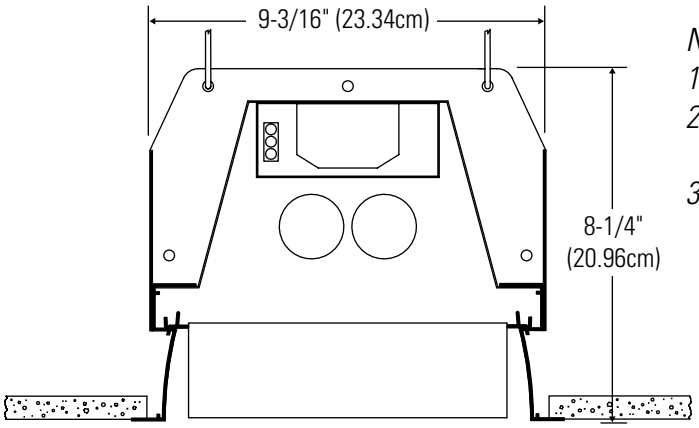
READ AND UNDERSTAND THESE INSTRUCTIONS BEFORE PROCEEDING.
RETAIN THESE INSTRUCTIONS FOR MAINTENANCE REFERENCE.

This fixture is intended for installation in accordance with the National Electrical Code and local regulations. To assure full compliance with local codes and regulations, check with your local electrical inspector before installation. To prevent electrical shock, turn off electricity at electrical panel before proceeding.

DO NOT INSTALL THIS SYSTEM IN A WET OR DAMP LOCATION.
DO NOT ENERGIZE ANYTHING OTHER THAN THE FIXTURES IN THE SYSTEM.

CONTRACTOR IS RESPONSIBLE FOR ADEQUATELY REINFORCING CEILING TO SUPPORT FIXTURE WEIGHT.
FIXTURE SHOULD BE INSTALLED PRIOR TO CEILING.




*NOTES:*

1. *Tools needed: hacksaw, screwdrivers, drill & pliers.*
2. *Self-driving type "tek" screws may be used in certain applications to assist in installation and preparation.*
3. *Be sure to keep fixture runs "As straight as possible" for best results.*

**GENERAL DESCRIPTION:** A modular recessed continuous trough fluorescent system with parabolic louvers which produces a continuous flow of light in linear or geometric configurations. CD12 consists of standard and telescoping modules so that linear runs of virtually any length can be constructed. Universal corners allow the installation of many lighting patterns uniquely suited to a particular space. Overlapping lamps minimize uneven brightness and produce an uninterrupted line of light where modules are joined together. Concealed openings are provided for neat extraction. Parabolic louvers assure shielding of the light source with a pleasant low-brightness luminosity. A concealed frame of extruded aluminum provides rigid support, allowing the louver blades to "float" in the trough. The louvers are compatible with other Lightolier parabolic louver fixtures.

**INSTALLATION:** Unitized housing is suspended by wire (by others). The telescoping module is used to comprise runs of virtually any length. Overlapping aluminum ceiling trim flanges and louver frames on telescoping modules are cut-to-fit at the site. Trim flanges are joined, locked and aligned with internal aligner splines. Fluorescent lamp chassis mounts into housing and is held in place with steel spring clips. Grounding and locking latches join chassis in continuous runs. Snap-together plug-in connectors are supplied with each module to facilitate installation. Louvers are installed to finished trough.

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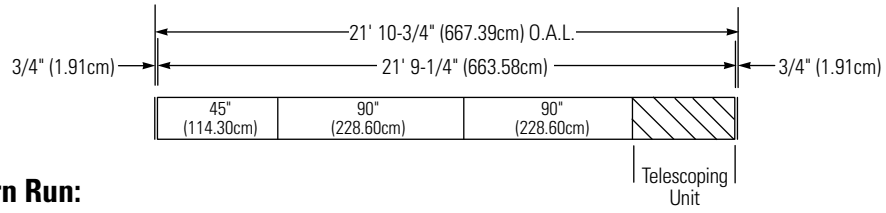
# SELECTION / ORDERING GUIDE

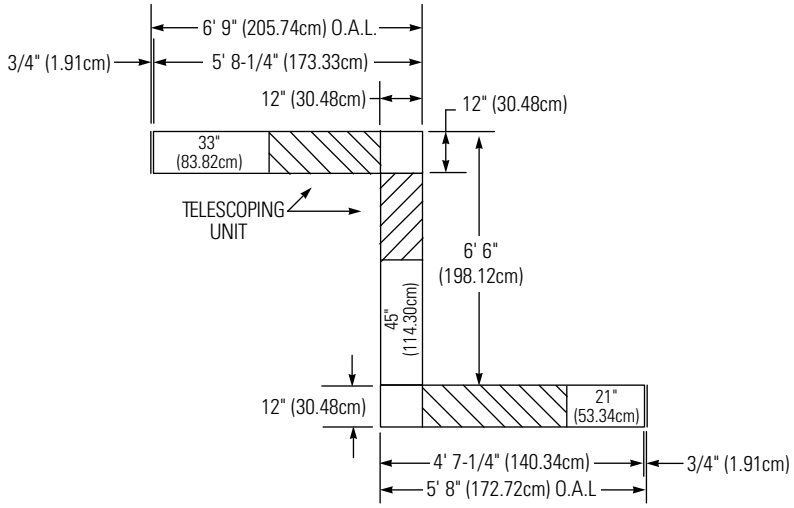
**Example of Straight Run:**

1. Consult plans for footage required for each linear run. For CD12 Overlap Trim installations, deduct 3/4"(1.91cm) at each end trim location for net linear footage.
2. Refer to ordering chart to determine total quantity of each type of module needed to complete each run and specify voltage 120 or 277.




**Example of Pattern Run:**

1. Consult plans, mark location of all corners as required.
2. Calculate net footage required for each linear run
   A. Deduct the dimensions for corners in each direction as follows: CD12-deduct 12"(30.48cm) for each corner.
   B. Deduct 3/4"(1.91cm) at each end trim location.
3. Refer to ordering chart to determine total quantity of each type of module needed to complete each run and specify voltage 120 or 277.
4. Continue to calculate other runs as above. Be sure to add all corners to total quantity.




| CATALOG NUMBER | ONE LAMP | LENGTH | FUNCTION | CATALOG NUMBER | TWO LAMPS | LENGTH | FUNCTION |
|---|---|---|---|---|---|---|---|
| **CD12-1121** | 1-17W | 21" (53.34cm) | MODULAR UNIT | **CD12-1224** | 2-17W | 24" (60.96cm) | MODULAR UNIT |
| **CD12-1133** | 1-25W | 33" (83.82cm) | MODULAR UNIT | **CD12-1236** | 2-25W | 36" (91.44cm) | MODULAR UNIT |
| **CD12-1145** | 1-32W | 45" (114.30cm) | MODULAR UNIT | **CD12-1248** | 2-32W | 48" (121.92cm) | MODULAR UNIT |
| **CD12-1190** | 2-32W | 90" (228.60cm) | MODULAR UNIT | **CD12-1296** | 4-32W | 96"(243.84cm) | MODULAR UNIT |
| **CD12-11T** | 1-32W | 27" (68.58cm) - 48" (121.92cm) | TELESCOPING UNIT | **CD12-12T** | 2-17W | 27" (68.58cm) - 48" (121.92cm) | TELESCOPING UNIT |
| **CD12-1C** | -- | 12" (30.48cm) | 90° UNIVERSAL CORNER | **CD12-1C** | -- | 12" (30.48cm) | 90° UNIVERSAL CORNER |

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# SELECTION / ORDERING GUIDE (CONT'D)

**CD12: One Lamp**

| CD12 | CD12-11T | CD12-1190 | CD12-1145 | CD12-1133 | CD12-1121 |
|---|---|---|---|---|---|
| MODULES REQUIRED / ROW LENGTH (MIN - MAX) | 27" - 48" 1-32W TELESCOPING | 90" 2-32W MODULE | 45" 1-32W MODULE | 33" 1-25W MODULE | 21" 1-17W MODULE |
| 4'0" - 5'9" | 1 | | | | 1 |
| 5'0" - 6'9" | 1 | | | 1 | |
| 6'0" - 7'9" | 1 | | 1 | | |
| 6'9" - 8'6" | 1 | | | 1 | 1 |
| 7'9" - 9'6" | 1 | | 1 | | 1 |
| 8'9" - 10'6" | 1 | | 1 | 1 | |
| 9'9" - 11'6" | 1 | 1 | | | |
| 10'6" - 12'3" | 1 | | 1 | 1 | 1 |
| 11'6" - 13'3" | 1 | 1 | | | 1 |
| 12'6" - 14'3" | 1 | 1 | | 1 | |
| 13'6" - 15'3" | 1 | 1 | 1 | | |
| 14'3" - 16'0" | 1 | 1 | | 1 | 1 |
| 15'3" - 17'0" | 1 | 1 | 1 | | 1 |
| 16'3" - 18'0" | 1 | 1 | 1 | 1 | |
| 17'3" - 19'0" | 1 | 2 | | | |
| 18'0" - 19'9" | 1 | 1 | 1 | 1 | 1 |
| 19'0" - 20'9" | 1 | 2 | | | 1 |
| 20'0" - 21'9" | 1 | 2 | | 1 | |
| 21'0" - 22'9" | 1 | 2 | 1 | | |
| 21'9" - 23'6" | 1 | 2 | | 1 | 1 |
| 22'9" - 24'6" | 1 | 2 | 1 | | 1 |
| 23'9" - 25'6" | 1 | 2 | 1 | 1 | |
| 24'9" - 26'6" | 1 | 3 | | | |
| 25'6" - 27'3" | 1 | 2 | 1 | 1 | 1 |
| 26'6" - 28'3" | 1 | 3 | | | 1 |
| 27'6" - 29'3" | 1 | 3 | | 1 | |
| 28'6" - 30'3" | 1 | 3 | 1 | | |
| 29'3" - 31'0" | 1 | 3 | | 1 | 1 |
| 30'3" - 32'0" | 1 | 3 | 1 | | 1 |
| 31'3" - 33'0" | 1 | 3 | 1 | 1 | |
| 32'3" - 34'0" | 1 | 4 | | | |
| 33'0" - 34'9" | 1 | 3 | 1 | 1 | 1 |
| 34'0" - 35'9" | 1 | 4 | | | 1 |
| 35'0" - 36'9" | 1 | 4 | | 1 | |
| 36'0" - 37'9" | 1 | 4 | 1 | | |

*1 inch = 2.45 centimeter*

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# SELECTION / ORDERING GUIDE (CONT'D)

**CD12: Two Lamps**

| CD12 | CD12-12T | CD12-1296 | CD12-1248 | CD12-1236 | CD12-1224 |
|---|---|---|---|---|---|
| MODULES REQUIRED / ROW LENGTH (MIN - MAX) | 27" - 48" 2-17W TELESCOPING | 96" 4-32W MODULE | 48" 2-32W MODULE | 36" 2-25W MODULE | 24" 2-17W MODULE |
| 4'3" - 6'0" | 1 | | | | 1 |
| 5'3" - 7'0" | 1 | | | 1 | |
| 6'3" - 8'0" | 1 | | 1 | | |
| 7'3" - 9'0" | 1 | | | 1 | 1 |
| 8'3" - 10'0" | 1 | | 1 | | 1 |
| 9'3" - 11'0" | 1 | | 1 | 1 | |
| 10'3" - 12'0" | 1 | 1 | | | |
| 11'3" - 13'0" | 1 | | 1 | 1 | 1 |
| 12'3" - 14'0" | 1 | 1 | | | 1 |
| 13'3" - 15'0" | 1 | 1 | | 1 | |
| 14'3" - 16'0" | 1 | 1 | 1 | | |
| 15'3" - 17'0" | 1 | 1 | | 1 | 1 |
| 16'3" - 18'0" | 1 | 1 | 1 | | 1 |
| 17'3" - 19'0" | 1 | 1 | 1 | 1 | |
| 18'3" - 20'0" | 1 | 2 | | | |
| 19'3" - 21'0" | 1 | 1 | 1 | 1 | 1 |
| 20'3" - 22'0" | 1 | 2 | | | 1 |
| 21'3" - 23'0" | 1 | 2 | | 1 | |
| 22'3" - 24'0" | 1 | 2 | 1 | | |
| 23'3" - 25'0" | 1 | 2 | | 1 | 1 |
| 24'3" - 26'0" | 1 | 2 | 1 | | 1 |
| 25'3" - 27'0" | 1 | 2 | 1 | 1 | |
| 26'3" - 28'0" | 1 | 3 | | | |
| 27'3" - 29'0" | 1 | 2 | 1 | 1 | 1 |
| 28'3" - 30'0" | 1 | 3 | | | 1 |
| 29'3" - 31'0" | 1 | 3 | | 1 | |
| 30'3" - 32'0" | 1 | 3 | 1 | | |
| 31'3" - 33'0" | 1 | 3 | | 1 | 1 |
| 32'3" - 34'0" | 1 | 3 | 1 | | 1 |
| 33'3" - 35'0" | 1 | 3 | 1 | 1 | |
| 34'3" - 36'0" | 1 | 4 | | | |
| 35'3" - 37'0" | 1 | 3 | 1 | 1 | 1 |
| 36'3" - 38'0" | 1 | 4 | | | 1 |
| 37'3" - 39'0" | 1 | 4 | | 1 | |
| 38'3" - 40'0" | 1 | 4 | 1 | | |

*1 inch = 2.45 centimeter*

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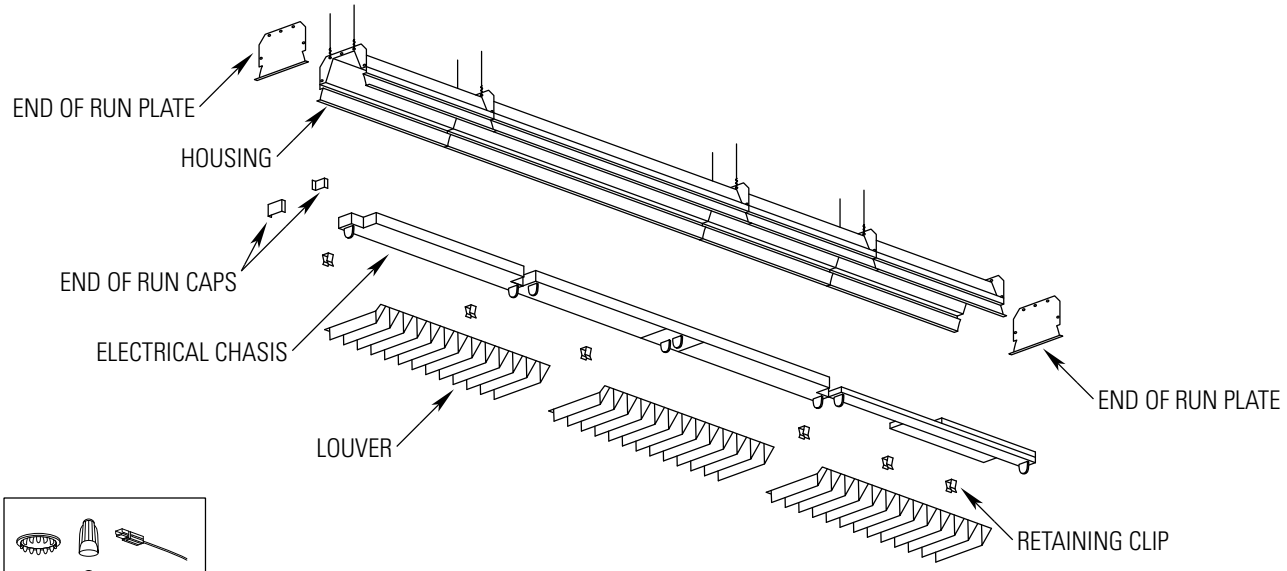
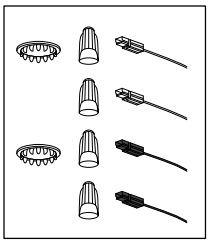
# PARTS LIST

1. NON TELE SECTION
   - [ ] Louver
   - [ ] Housing
   - [ ] Electrical Chassis
   - [ ] Retaining Clips
   - [ ] Aligner Clips

2. TELE SECTION
   - [ ] Louver
   - [ ] Housing
   - [ ] Electrical Chassis
   - [ ] Retaining Clips
   - [ ] Aligner Clips (not shown)
   - [ ] Service Entry Kits
   - [ ] End of Run Caps
   - [ ] End of Run Plates

*NOTE: END OF RUN PLATES are shipped in the telescopic section cartons.*



SERVICE ENTRY KIT

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# INSTALLATION

**1. TO INSTALL TROUGH HOUSING**

After consulting the plans, prepare the first housing to be installed by installing the fixture end plate: This HOUSING then installs using hanging suspension wires that are secured to the building. *NOTE: END OF RUN PLATES are shipped in the telescopic section cartons.*

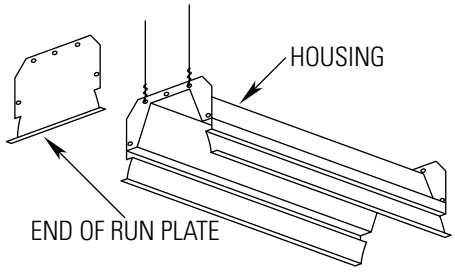


**Figure 1**

**2. TANDEM MOUNTING**

The next fixtures then install, one after the other, attaching to each other and hanging on SUSPENSION WIRES (by others):

- Use supplied ALIGNER CLIPS to align trim from fixture to fixture.
- Attach yokes from fixture to fixture with supplied SCREWS & NUTS.
- Leveling with finished ceiling line is done by lengthening or shortening the SUSPENSION WIRES (by others).

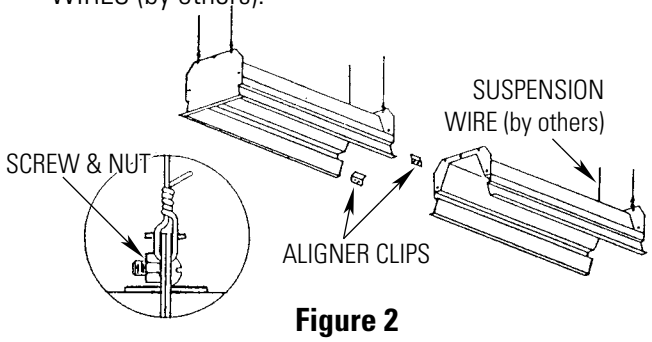


**Figure 2**

**3. TRIMMING TELESCOPIC FIXTURES**

The adjustable sizes are between 27" and 48". To trim:

- Remove trim pieces from the HOUSING and trim to size. Allow 3/4" for the END PLATE to be installed. Use the JIG supplied for cutting the trim. (Fig. 3)
- Collapse HOUSING to meet the trim pieces flush and reassemble unit.
- Install fixture END PLATE.

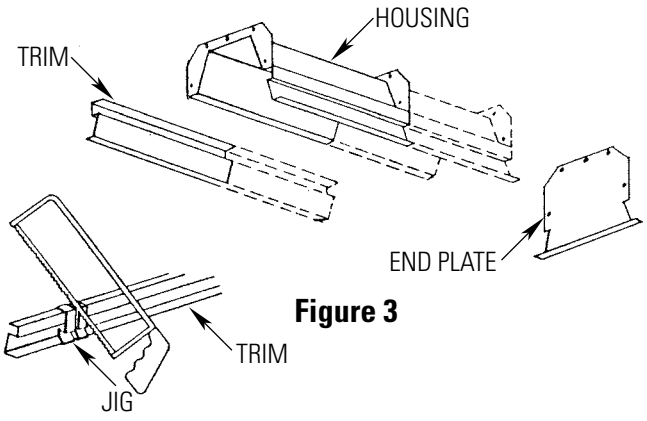


**Figure 3**

**4. END OF FIXTURE RUN**

- Fixture runs end with a trimmed tele section. The trimmed tele installs as shown below.
- Attach yokes from fixture to fixture with supplied SCREWS & NUTS.

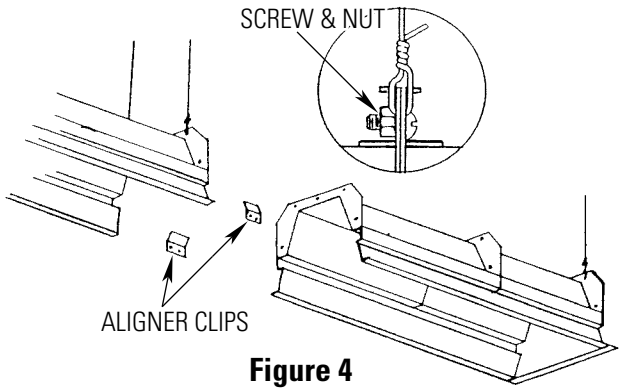


**Figure 4**

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# INSTALLATION (CONT'D)

**5. INSTALL ELECTRICAL CHASSIS**

- The ELECTRICAL CHASSIS are designed to snap into the HOUSING with snap-in clips and electrical connectors. (Fig. 5)
- The ELECTRICAL CHASSIS installation begins at the start of the run and then overlap as each successive ELECTRICAL CHASSIS is installed. Use END OF RUN CAPS to "cap off" ELECTRICAL CHASSIS of the first ELECTRICAL CHASSIS installed.
- The SERVICE ENTRY KIT is used to attach the power supply conductors of the fixture run. This may be done at any section. (Fig. 6)
- Fixture runs that end with a tele section, will use a tele electrical. There is a one-lamp tele electrical (Fig. 7) and a two-lamp tele electrical (Fig. 8)

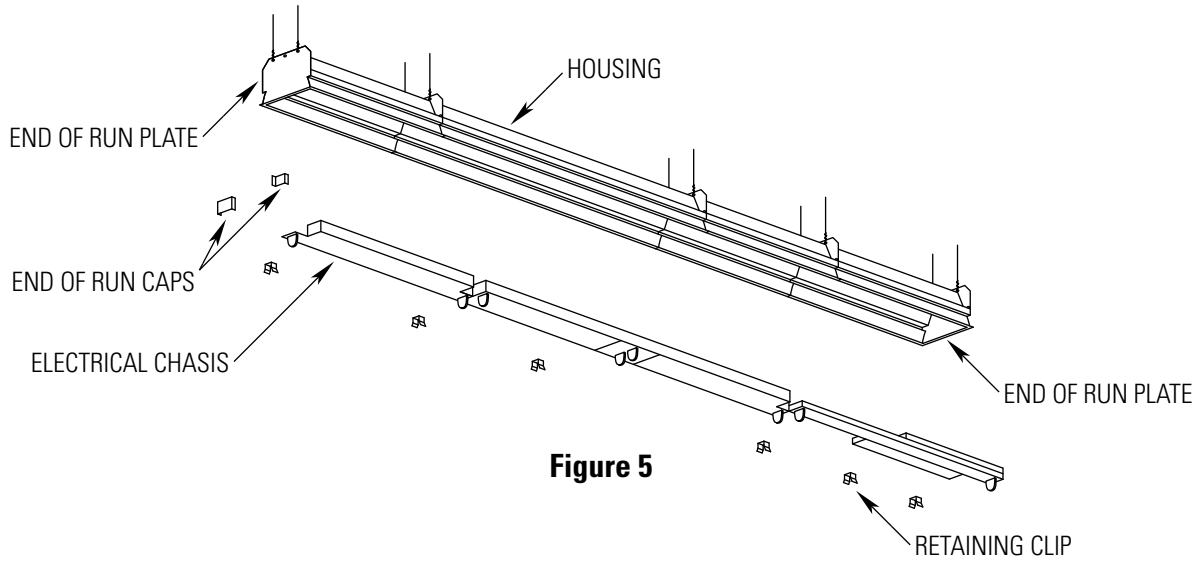


**Figure 5**

WIRING SCHEMATIC
Showing continuous plug & socket connections.
(Electrical chassis show separated for simplification)

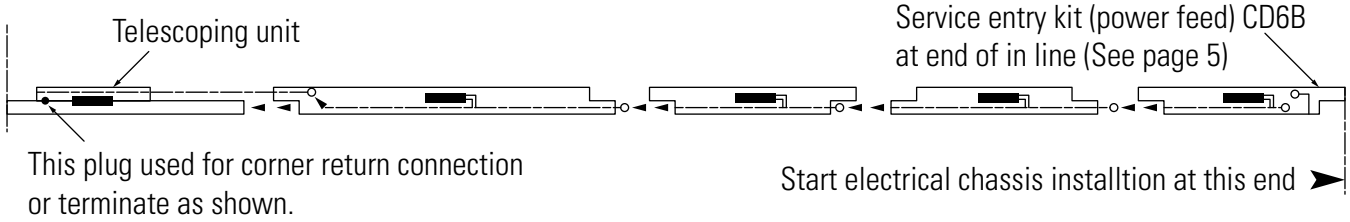


**Figure 6**

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# INSTALLATION (CONT'D)

**TELE ELECTRICAL (ONE LAMP)**

A. Position ELECTRICAL CHASSIS to HOUSING and then install with RETAINING CLIPS. The lamp arm overlaps into the previous fixture section.

B. Feed CONDUIT and WIRES into the previous electrical. Attach CONDUIT to ELECTRICAL CHASSIS with MOUNTING PLATE. Make electrical connections with a "SERVICE ENTRY KIT". (See page 5)

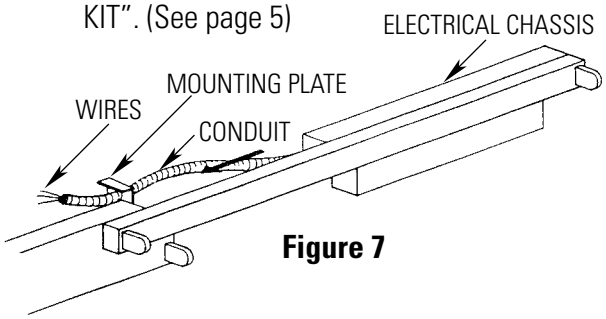


**Figure 7**

**6. INSTALL LAMPS (Furnished by others)**

**TELE ELECTRICAL (TWO LAMP)**

A. Follow steps A & B of the one lamp tele. (Fig. 7)

B. Depending on size, once the two lamp is attached, loosen the SCREWS to the LAMP ARMS and spread the LAMP ARMS apart to fill the section. Tighten the SCREWS.
NOTE: Additional chassis mounting holes are in the channel of the chassis.

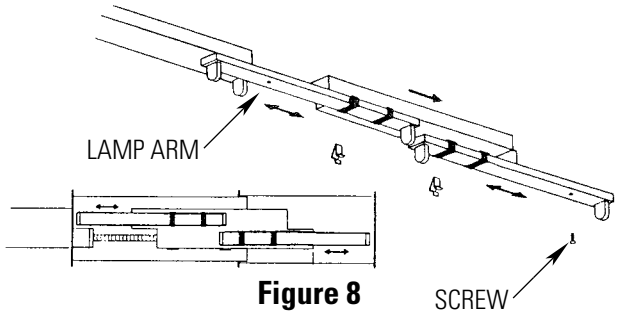


**Figure 8**

**7. INSTALL LOUVERS**

A. Lift and tilt LOUVER ASSEMBLY into HOUSING and rest INSIDE groove on extruded trim flange. (Fig.9)

B. Field cut last louver section in run to required length. (Fig. 10)

C. Level and align all LOUVER ASSEMBLIES.

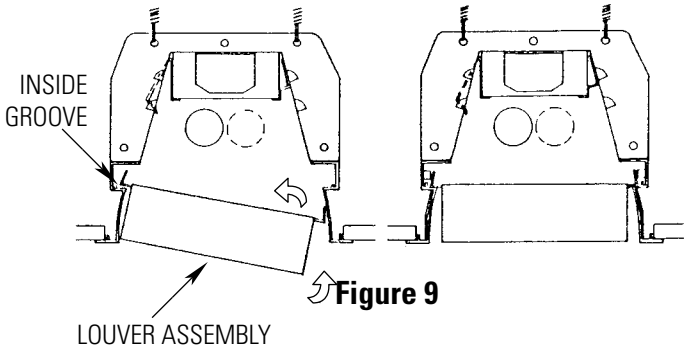


**Figure 9**

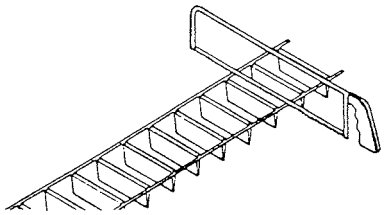

**Figure 10**

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# PATTERN RUN WITH CORNERS

**1. FIXTURE RUNS USE 90° CORNERS TO CREATE PATTERNS**

- Runs that use CORNER SECTION(S) must be plotted using the information found on page 2 of the instruction sheet.
- Plotted fixture runs with corners typically use a tele fixture section into a corner section and a non-tele fixture section out of the corner section, beginning the next run. (See page 2)
- Pattern runs may start from any place. However, the same direction or layout as that in a straight run may render the best results.

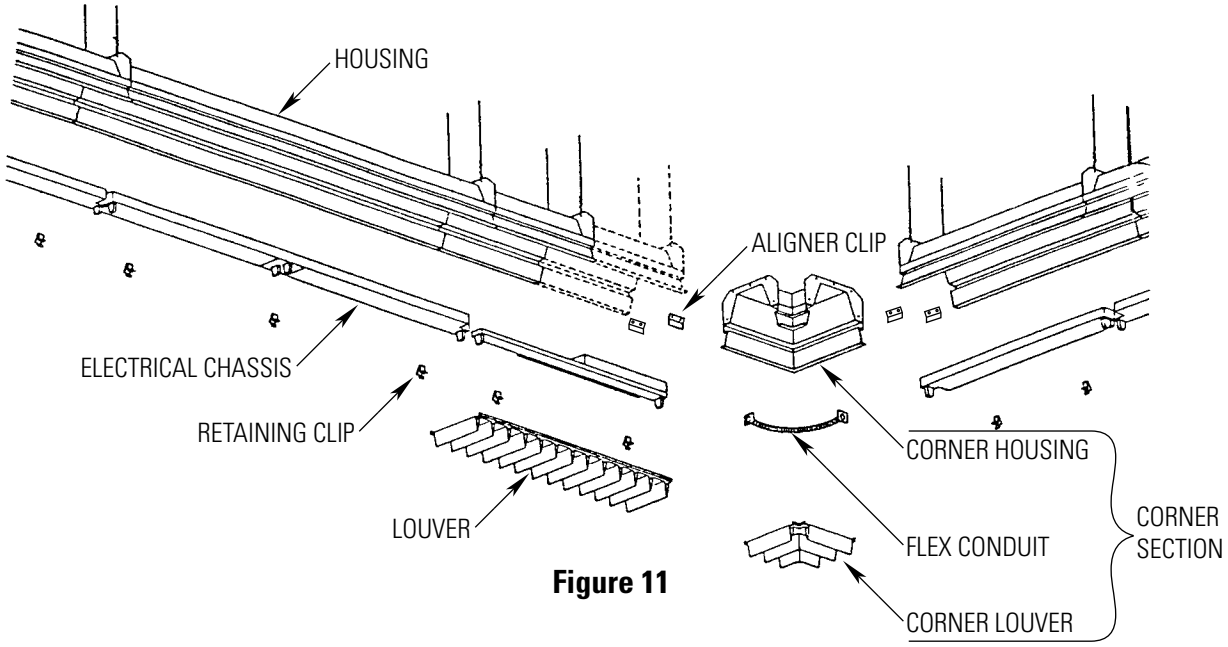


**Figure 11**

**2. TELE PREPARATION**

- The fixture run into a corner must accounted for the installation of the CORNER SECTION. (See page 2 for size details) These runs typically end with a tele in the corner.
- The tele must be trimmed as in a straight run but will not use an END PLATE. As shown in Installation step 3 on page 6. (Fig. 3)

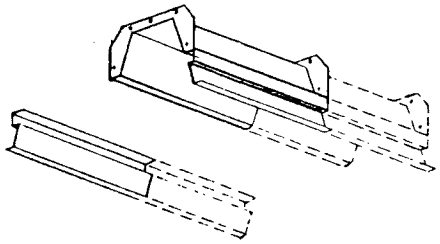

**Figure 12**

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# PATTERN RUN WITH CORNERS (CONT'D)

**3. TELE INSTALLATION-INTO CORNER**

- The sequence of installation is to install the tele, install the CORNER SECTION, then install the first housing of the next run.
- The corner section, if desired, may be attached to a section and installed along with that section to complete the turn.
- See Installation step 2 on page 6 for additional mounting details. (Fig. 2)

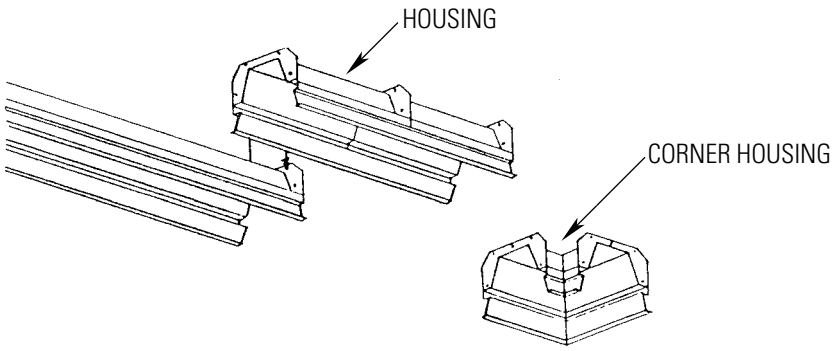


**Figure 13**

**4. CORNER-NEXT FIXTURE**

- As the CORNER HOUSING is installed, it must be attached to the adjacent fixture section yokes with screws, as well as to the building structure with SUSPENSION WIRE (by others).
- Be sure to level with the finished ceiling line.
- Be sure to keep the fixture runs as straight as possible for best results.

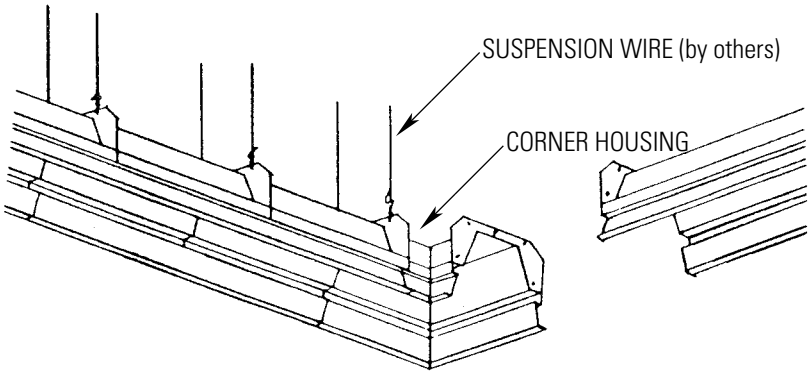


**Figure 14**

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# PATTERN RUN WITH CORNERS (CONT'D)

**ELECTRICAL CHASSIS INSTALLATION**

- When in a pattern, the ELECTRICAL CHASSIS are installed into the first installed HOUSING then continuously end-on-end throughout the run. The very first ELECTRICAL CHASSIS must have END CAPS installed at its open end as in a straight run. As shown in Installation step 5 on page 7. (Fig. 5)
- A FLEX CONDUIT will continue the pattern around a corner and will connect ELECTRICAL CHASSIS to ELECTRICAL CHASSIS.
- The amount of fluorescent lamp that can be moved into the corner is up to the installer. This may require field modification to the FLEX CONDUIT.

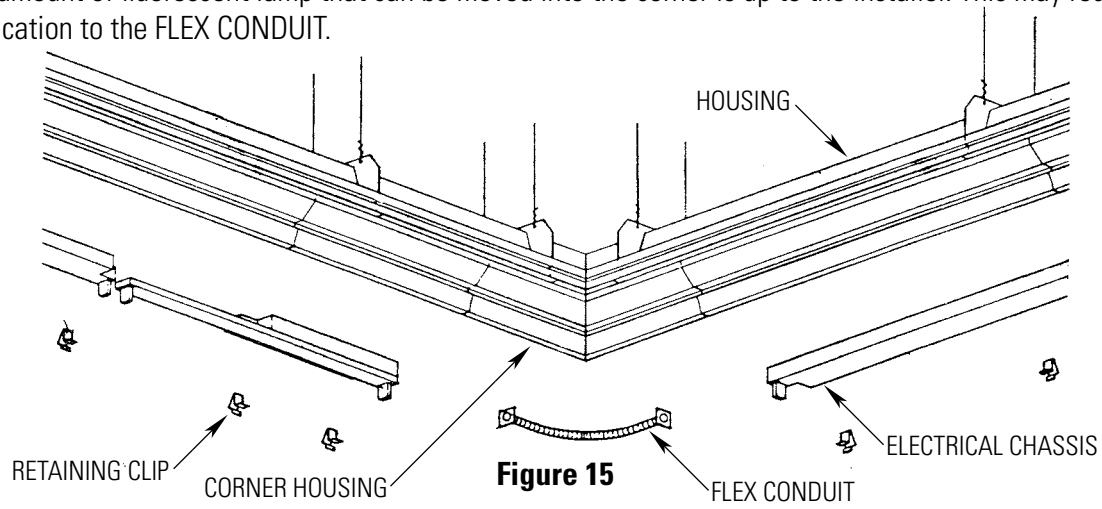


**Figure 15**

**5. INSTALL LAMPS (FURNISHED BY OTHERS)**

**6. LOUVER INSTALLATION**

- LOUVERS are installed beginning with the first HOUSING in the pattern and then continuously until the end.
- LOUVERS that are to be installed into a trimmed tele section will also have to be field trimmed to size.
- Be sure to align and level all LOUVERS to insure best results of a proper installation. As show in Installation step 7 on page 8. (Fig. 9 & 10)

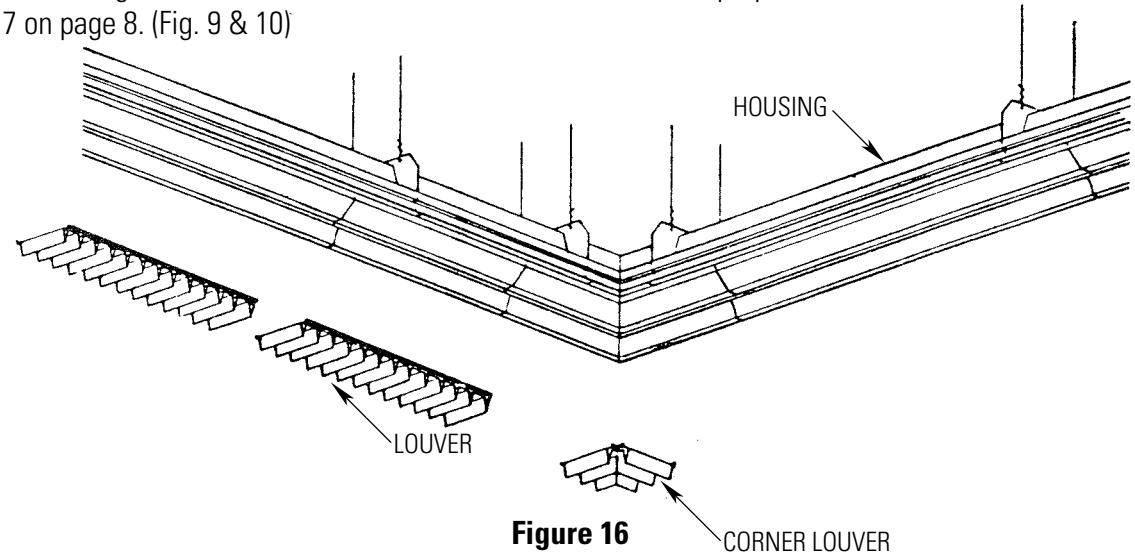


**Figure 16**

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