

Order and Application of Central Office Equipment Lighting Fixtures

Contents	Subject	Page
	1. General	2
	1.1 Purpose.....	2
	1.2 Filing Instructions	2
	1.3 Copyright and Responsibility	2
	1.4 Disclaimer	2
	2. Overview	3
	2.1 Available Light Fixtures	3
	Exhibit 1 - Typical SENTINEL Double-Sided Lighting Fixture	3
	3. Ordering Lighting Fixtures	4
	3.1 Labeling Lighting Panels	4
	3.2 Responsibilities	4
	3.3 When Remote-Controlled Switching System is Needed	4
	4. Application of Lighting Fixtures	4
	4.1 Arranging Lighting Fixtures and Lamps	5
	4.2 Lighting Over Writing Shelves	5
	4.3 Other Lighting Fixture Locations	5
	4.4 Lighting Circuits	5
	4.5 Grounding	5
	Exhibits	6
	Exhibit 2 - Ordering Information on SENTINEL Lighting Fixtures	6
	Exhibit 3 - Typical Placement of Lighting Between Wall and Equipment Frame	7
	Exhibit 4 - Typical Placement of Lighting Between Equipment Frames (With Ladders)	8
	Exhibit 5 - Typical Placement of Lighting Between Equipment and Distributing Frames	8
	Exhibit 6 - Typical Placement of Lighting Between Distributing Frame and Wall (With Ladders)	9
	Exhibit 7 - Typical Placement of Lighting Between Equipment Frames (Without Ladders)	9
	Exhibit 8 - Typical Placement of Lighting Between Wall and Distributing Frame (Without Ladders)	10
	Exhibit 9 - Typical Placement of Lighting Between Distributing Frames	10



1 . General

1.1 Purpose

This practice provides information on:

- Ordering parts for aisle lighting in central offices using either electro-mechanical or electronic equipment. This includes:
 - Lighting fixtures.
 - Fluorescent lamps.
 - Replacement components.
- Typical arrangements of lighting fixtures in relation to:
 - Ladders.
 - Frame lineups.
 - Distributing frames.
 - Walls.

NOTE: This updated practice reflects the discontinuance of Sylvania Bay-Lite II fixtures.

1.2 Filing Instructions

File this practice in numerical order in your practices set. This practice supersedes Issue 4, April 1979. Remove and discard Issue 4 and replace it with this Issue 5 in your practices set.

1.3 Copyright and Responsibility

This practice was updated by the COE Engineering Department and published by the Telephone Operations Administrative Services Department. For more information about this practice contact the COE Engineering Department.

No part of this work may be reproduced or copied in any form or by any means -- graphic, electronic, or mechanical, including photocopying, recording, taping, or information storage and retrieval systems -- without the written permission of the Administrative Services Department, GTE Telephone Operations Headquarters, Irving, Texas.

1.4 Disclaimer

This practice has been prepared for GTE Telephone Operations employees. GTE Telephone Operations hereby disclaims any responsibility or liability for any consequential or inconsequential damages that may result from the use of this practice.

2. Overview

2.1 Available Light Fixtures

Purchasers receive SENTINEL 1 lighting fixtures (Exhibit 2) and lamps (Exhibit 1) when they order aisle lighting from AG Communications Systems (AGCS). To do this, use control purchase orders, and indicate your choice on the hardware data sheets.

SENTINEL lighting fixtures and lamps are available in the following lengths:

- Single-sided fixture, approximately 48 inches long.
- Double-sided fixtures, approximately 48 or 96 inches long.

Details contained in Exhibits 3 through 9, pages 7 through 10, are **GENERALLY** accepted. Use whenever possible.

NOTE: These figures are general guides. They can be modified for a particular job to meet:

- Local laws.
- Special requirements.

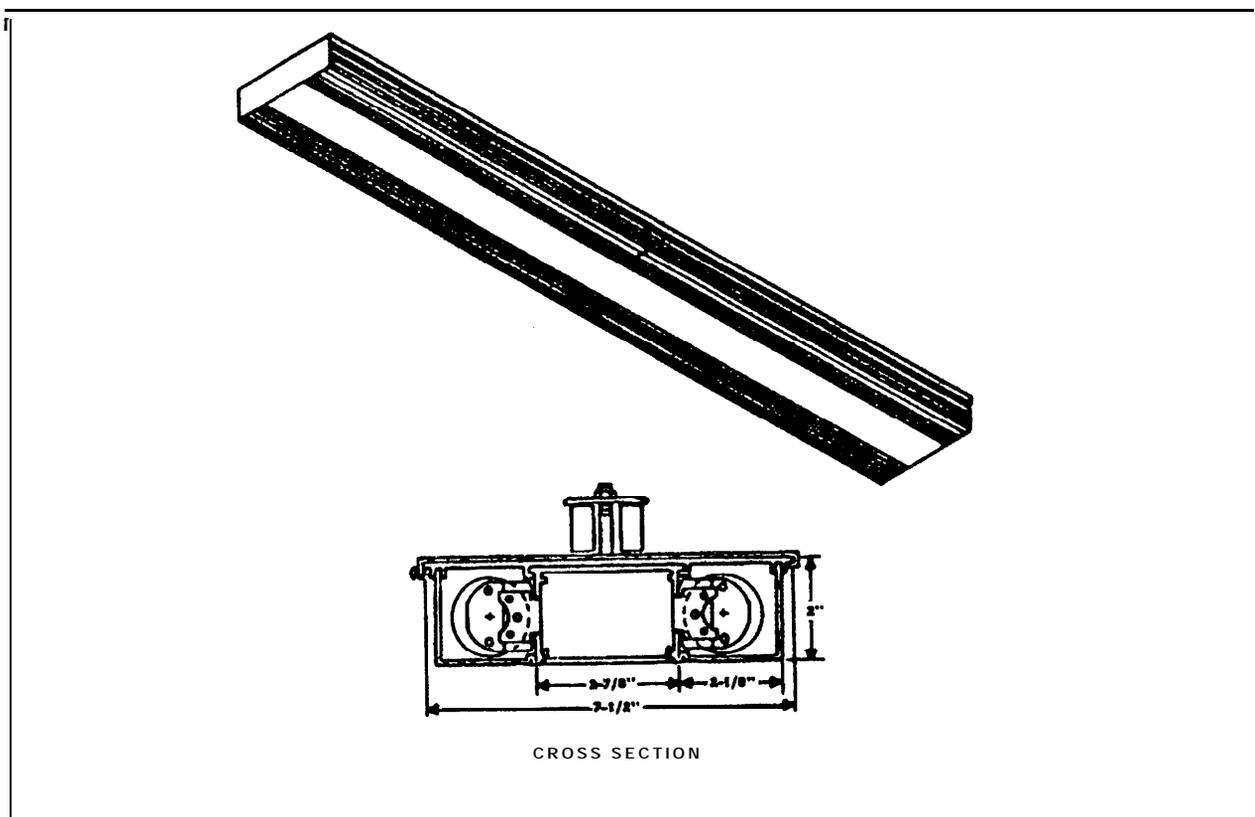


Exhibit 1 - Typical SENTINEL Double-Sided Lighting Fixture

3. Ordering Lighting Fixtures

3.1 Labeling Light Panels

Clearly label all lighting panels with the correct voltage the panel serves, i.e., 120/208 volts or 277/480 volts. The actual locations of the fixtures and various lamps are shown on the specific job drawings.

NOTE: Purchasers must order fixture wiring, conduits, and electrical fittings separately from fixtures and lamps. Locations of these items are not shown on specific job drawings.

3.2 Responsibilities

The individual operating Areas are responsible for:

- Having their electrical contractors install and connect all related equipment.
- Providing all information required for the complete lighting job.

3.3 When Remote- Controlled Switching System Is Needed

In electronic offices only, the equipment frame end-aisle covers have on-off non-locking switches for aisle lighting at the main-aisle fuse end of each equipment frame lineup. You need a 24-VAC (low-voltage) remote-controlled switching system (or equivalent) to work with the end-aisle light switches.

COE Construction is responsible for having the contractor furnish, locate, and install the remote-controlled switching system.

4. Lighting Fixtures Application

4.1 Arranging Lighting Fixtures and Lamps

Arrange lighting fixtures and lamps in a pattern which is either directional or symmetrical on any specific aisle. Do not stagger directional and symmetrical types of lighting when using for:

- Front and rear aisles of equipment frame lineups.
- Single-sided distributing frames front and/or rear aisles.
- Writing shelves of the maintenance and test frames.

NOTE: Immediately replace any defective starters, flickering fluorescent lamps, or noisy ballasts to prevent noise transients from being:

- Induced into the electrical power supply line.

OR

- Radiated (if in close proximity) to an electronic switching system.

4. Lighting Fixtures Application, continued

- 4.2
Lighting Over
Writing Shelves** Center symmetrical lighting over the writing shelves to provide sufficient lighting for reading material.
- 4.3
Other Lighting
Fixture Locations** Order chins, hooks, or adapter clamps to suspend each lighting unit when placing lighting fixtures in areas away from the ironwork or equipment frames. This includes locations close to a test desk or in the power room.
- 4.4
Lighting Circuits** Serve all lighting circuits with commercial AC power. Decide whether to use standby AC or DC power supply depending upon the reliability of the commercial power.
- 4.5
Grounding** Each light ballast must be grounded to meet requirements covered in GTE Telephone Operations Practice 795-805-072, AC Service Grounding Engineering Applications.

Exhibits

ITEM	MATERIAL CODE	PART NO.	MANUFACTURER'S NO.	DESCRIPTION
1	300700	FD-1023-KP (Notes 2 & 3)	AT-252DS-DH	Double-sided 48-inch fixture with two 40-watt 120-Vac fluorescent lamps and end caps.
2	300701	FD- 1023-KR (Notes 2 & 3)	ATX-2524DS-DH	Double-sided 48-inch fixture with two 40-watt 120-Vac fluorescent lamps (includes junction plate).
3	888813	FD-1023-KS (Notes 2 & 3)	AT-2544DS-DH	Double-sided 96-inch fixture with four 40-watt 120-Vac fluorescent lamps and end caps.
4	300702	FD-1023-KT (Notes 2 & 3)	ATX-2544DS-DH	Double-sided 96-inch fixture with four 40-watt 120-Vac fluorescent lamps (includes junction plate).
5	301135	FD-1023-KW (Notes 2 & 4)	AT-2524DS-277	Double-sided 48-inch fixture with two 40-watt 277-Vac fluorescent lamps and end caps.
6	766661	FD-1023-KY (Notes 2 & 4)	ATX-2524DS-DH-277	Double-sided 48-inch fixture with two 40-watt 277-Vac fluorescent lamps (includes junction plate).
7	301136	FD- 1023-M (Notes 2 & 4)	AT-2544DS-DH-277	Double-sided 96-inch fixture with four 40-watt 277-Vac fluorescent lamps and end caps.

NOTES:

1. Fixture and replacement components with only one part number.
2. Fixtures are supplied with hanger assemblies for single channel mounting.
3. Fixtures are standard.
4. Fixtures are for M&A only.

Exhibit 2 - Ordering Information on SENTINEL Lighting Fixtures

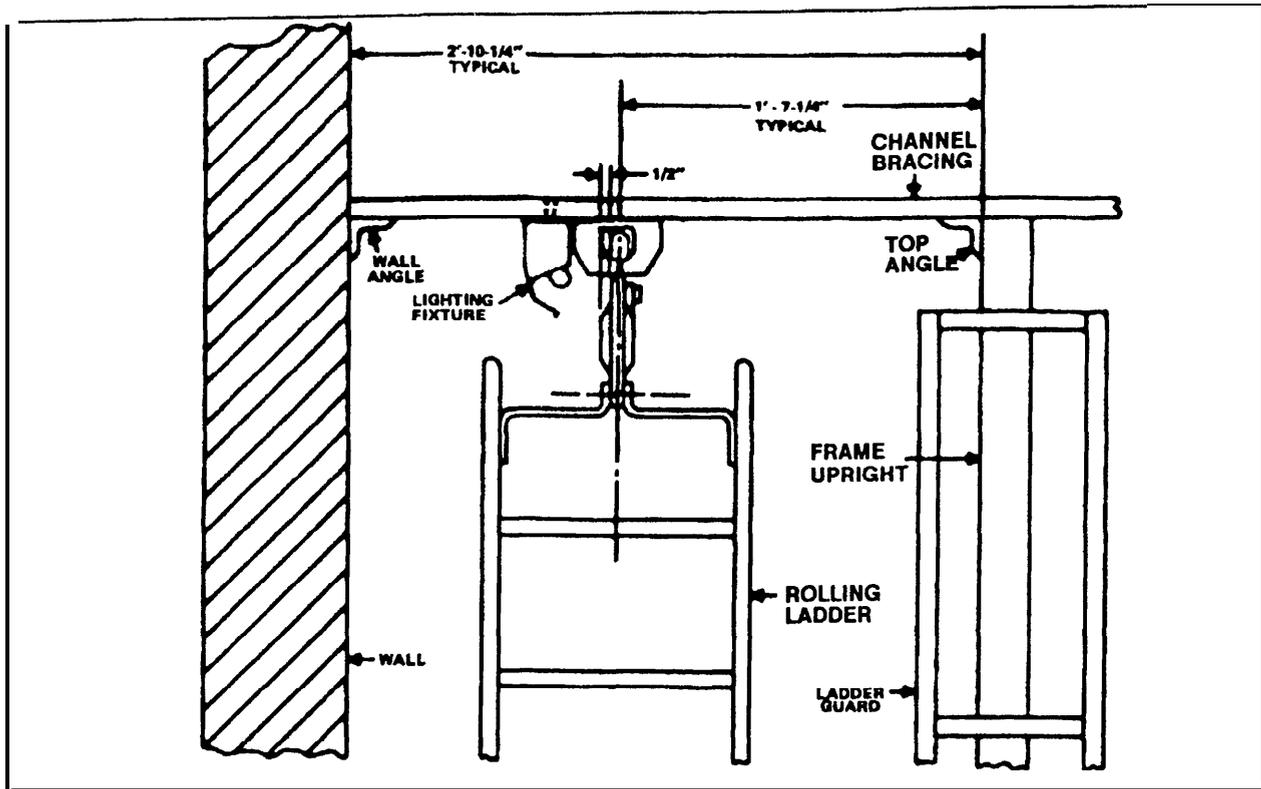


Exhibit 3 - Typical Placement of Lighting Between Wall and Equipment Frame

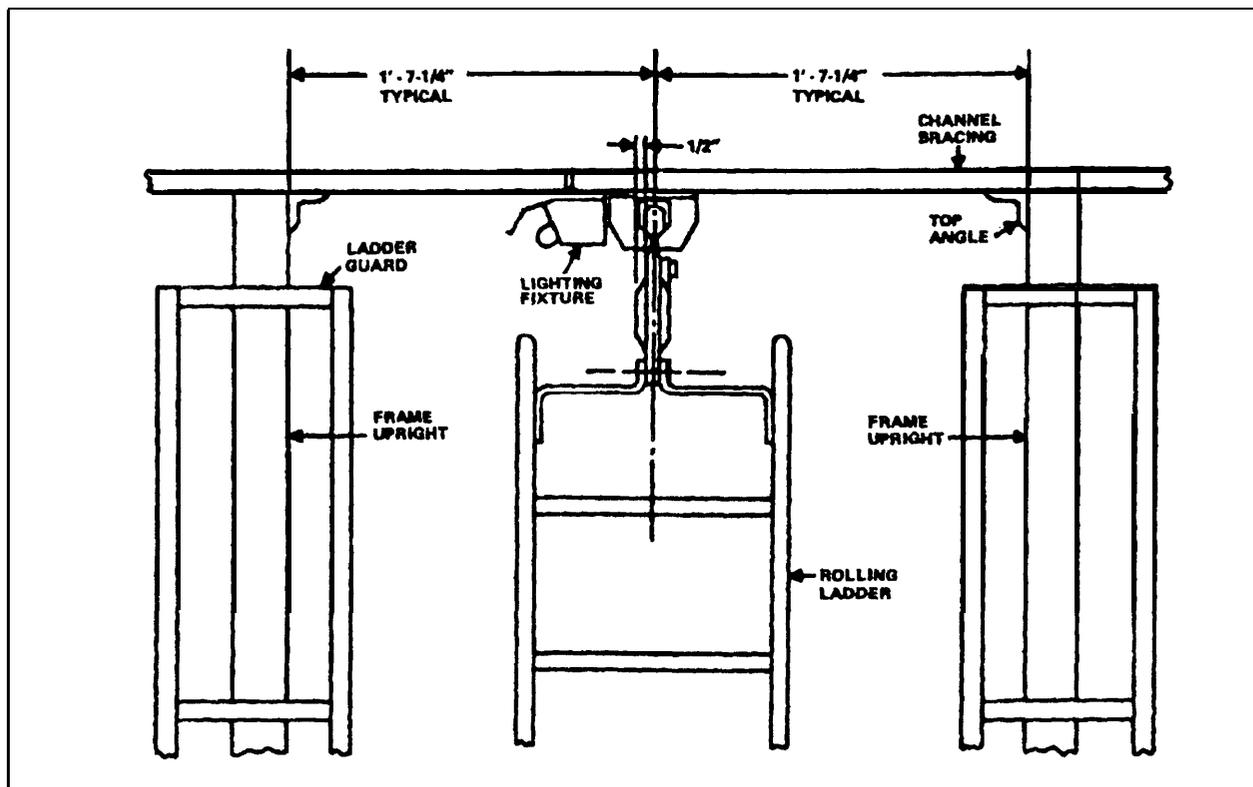


Figure 4 - Typical Placement of Lighting Between Equipment Frame (With Ladders)

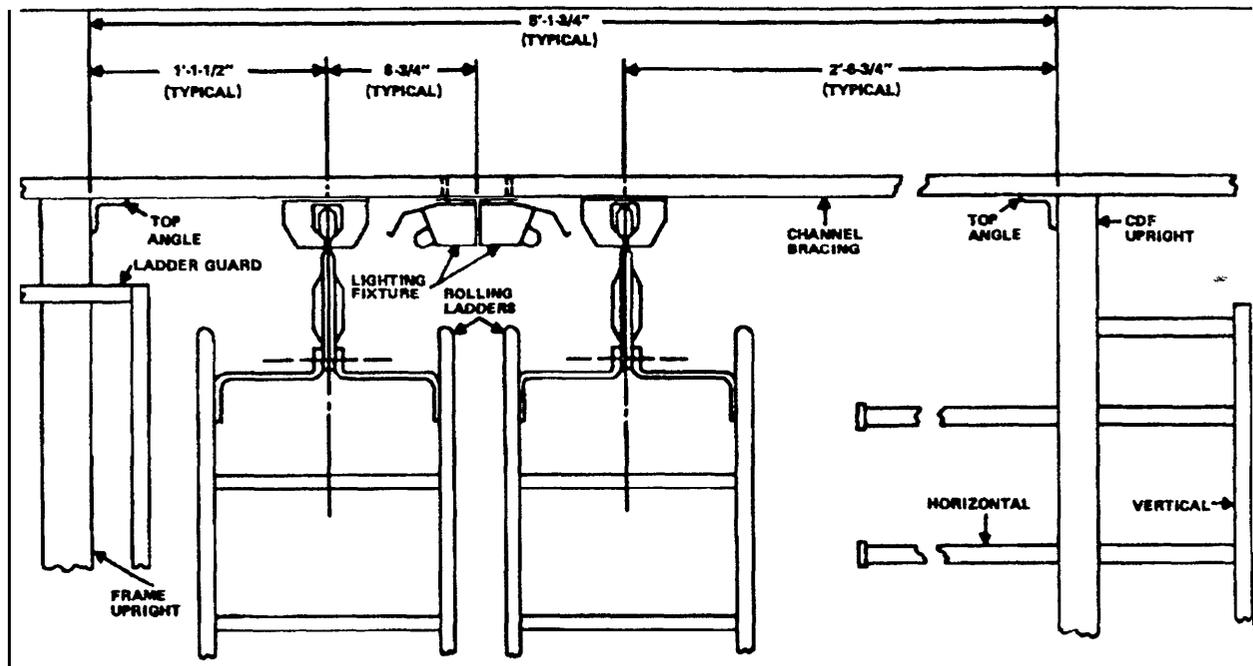


Exhibit 5 - Typical Placement of Lighting Between Equipment and Distributing Frames

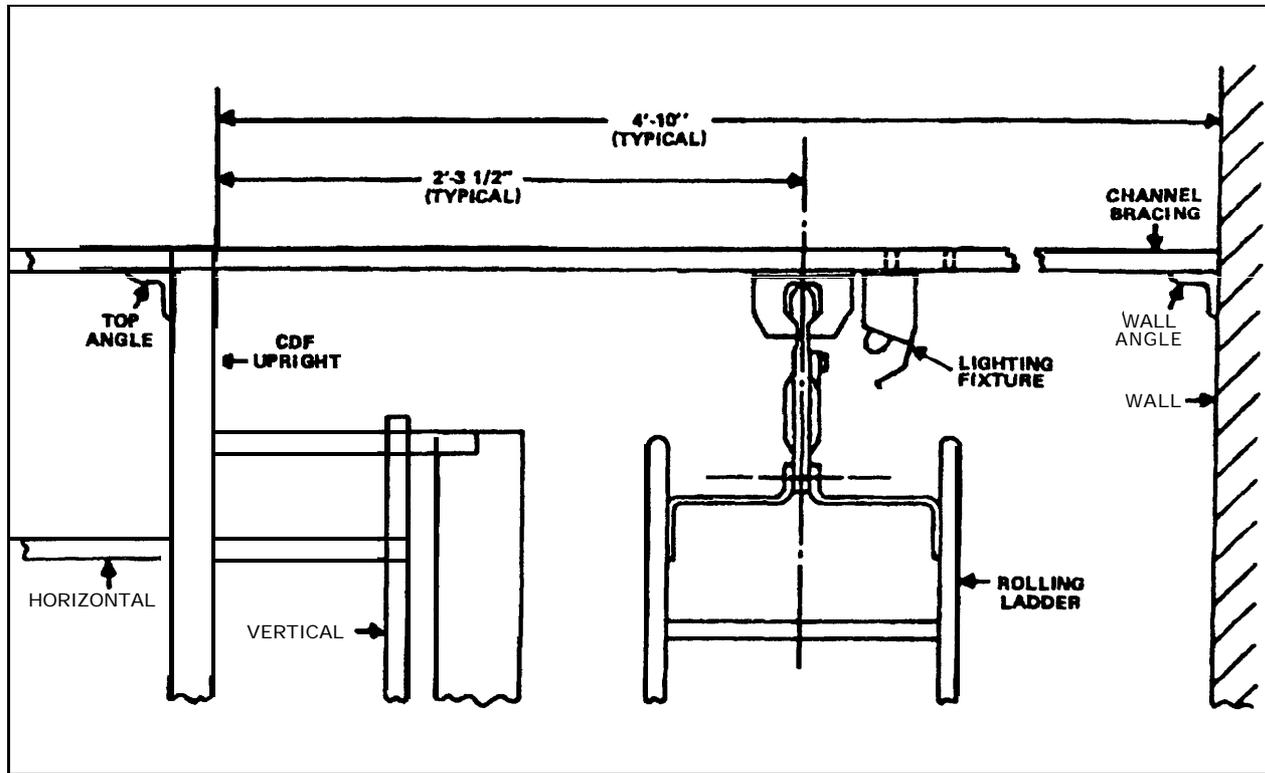


Exhibit 6 - Typical Placement of Lighting Between Distributing Frames and Wall (With Ladders)

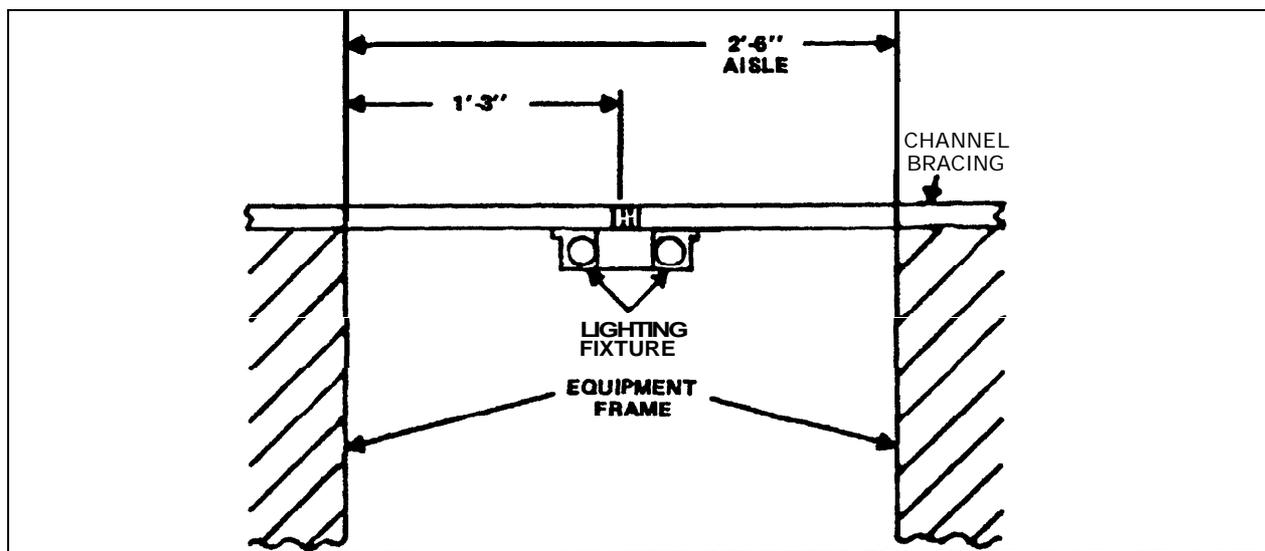


Exhibit 7 - Typical Placement of Lighting Between Equipment Frames (Without Ladders)

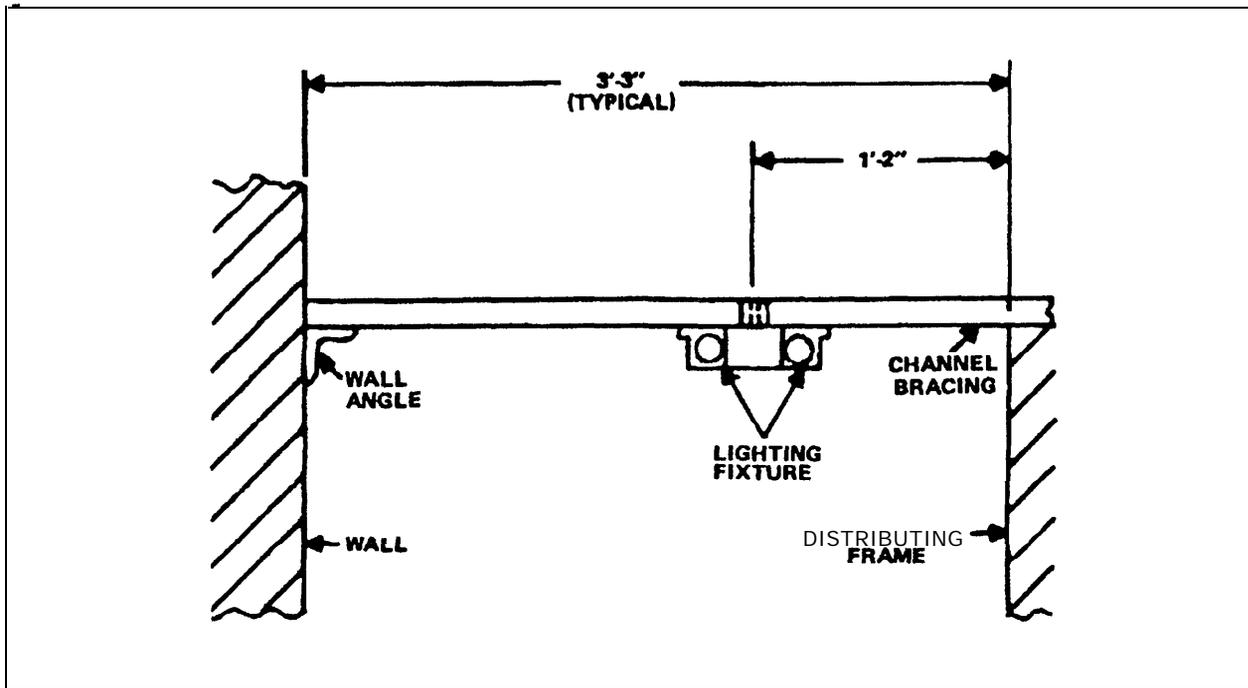


Exhibit 8 - Typical Placement of Lighting Between Wall and Distributing Frame (Without Ladders)

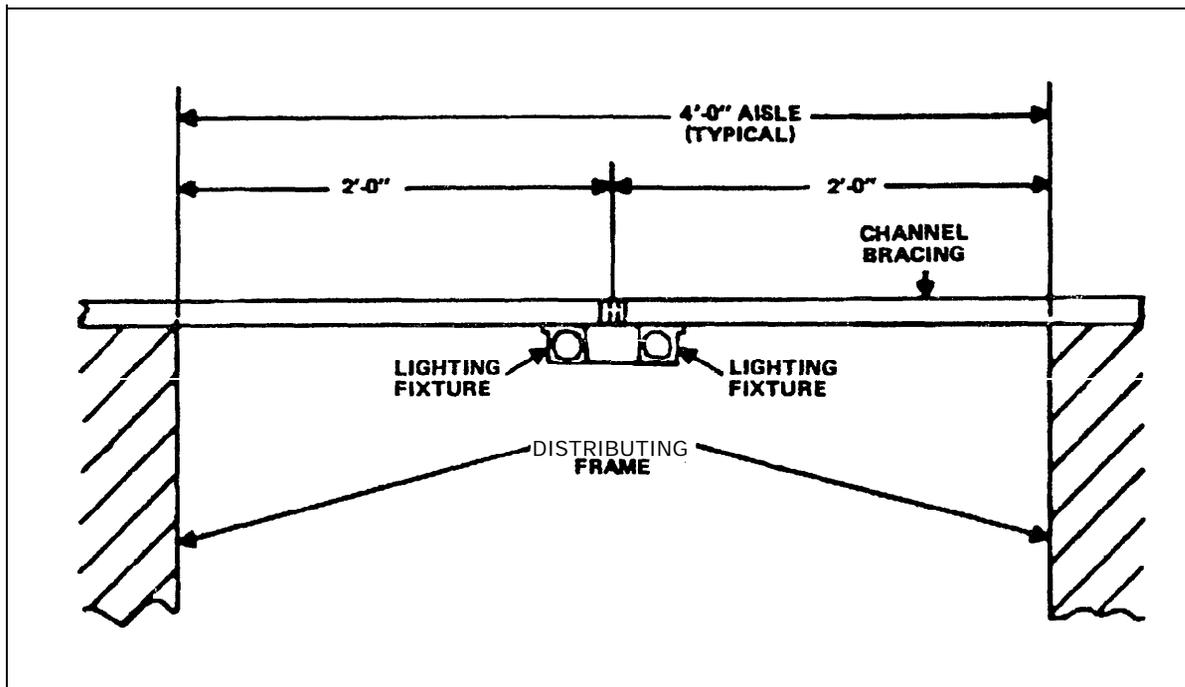


Exhibit 9 - Typical Placement of Lighting Between Distributing Frames