

Subject: Specialite™ Patient Light (P645)—Instructions for Installing at a Wall Box or with a Flatwall Headwall System (P670E)

Introduction

This procedure provides instructions for installing a 3' (91 cm) or 4' (122 cm) long Specialite™ Patient Light (P645) at a wall box or with a Flatwall Headwall System (P670E). Before starting this procedure, read and understand all of the instructions for the parts being installed.

Tools required:	As-built drawings	Tape measure
	Level	Safety goggles
	Electric drill or power screwdriver	1" drill bit
	¼" drill bit	Broom
	Dustpan	Chalk line
	Stud finder	9/16" deep socket
	Screwdriver	#2 phillips screwdriver
	5/16" nut driver	Socket wrench (ratchet)

Parts required:	(1)	P645	Specialite™ Patient Light—3' or 4'
	(1)	55518	Bag assembly
	(2)	21046	Toggle wing
	(2)	58866	Stud, 3/8"-16 x 4 3/16"
	(2)	29325	Stud guide
	(2)	55408	Grommet edging—2"
	(2)	55409	Grommet edging—3"
	(4)	53143-01	Screw, #12, self-drilling, hex head
	(1)	55691	Face ring—wall box

55518, Bag assembly, includes the following items:

(2)	29591	Screw, #8, self-drilling
(4)	16114	Screw (#6-32 x ½", flat head)
(4)	52555-03	Screw, machine, pan, phillips, #8-32, 3/8"
(2)	34084	Lockwasher—external tooth

Preparing the Wall for Installation



WARNING:

The installation method differs for each wall and construction type. Failure to determine the wall and construction type could result in the collapse of the Specialite™ Patient Light. Personal injury or equipment damage could occur.

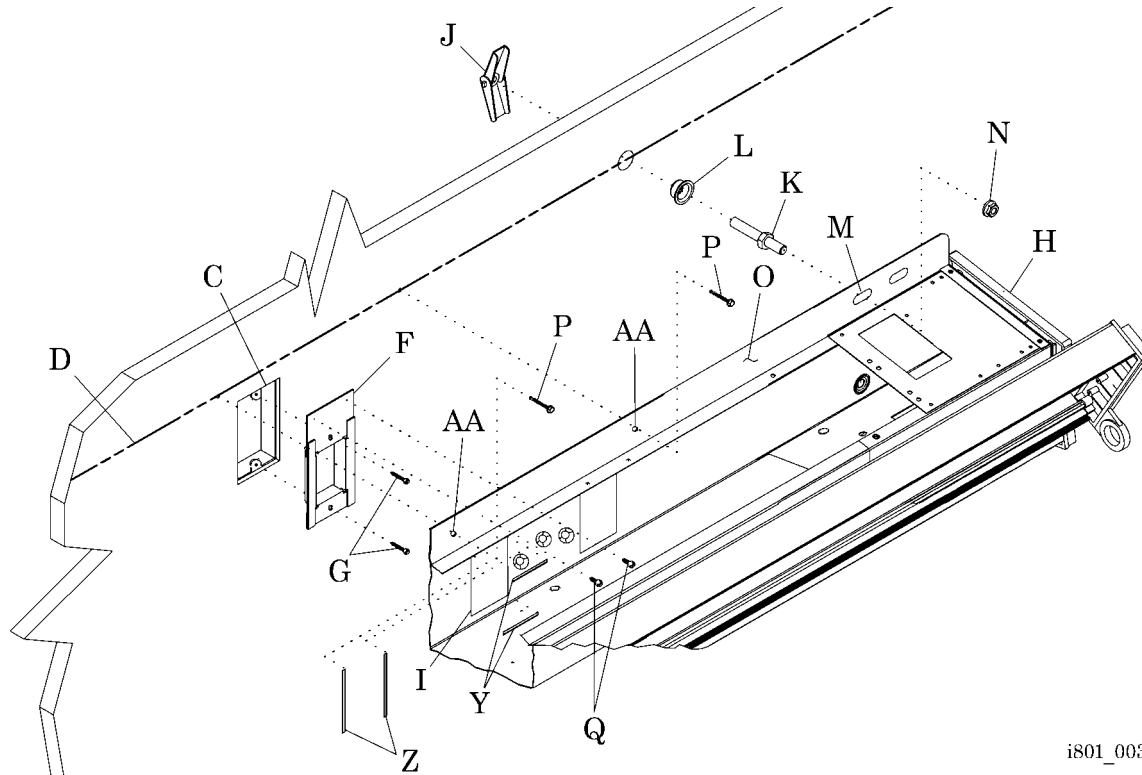
1. Before proceeding, refer to the local or state building codes, and determine the wall type and construction type:
 - **Seismic** walls are constructed to prevent damage from an earthquake.
 - **Non-seismic** walls are **not** constructed to prevent damage from an earthquake.
 - **Fire-rated** walls are constructed to prevent the spread of fire.
 - **Non-fire-rated** walls are **not** constructed to prevent the spread of fire.
2. Do **one** of the following:
 - For **seismic** walls, install wall backing plates according to the Office of Statewide Health, Planning, and Development (OSHPD)-approved drawings and the as-built drawings.
 - For **non-seismic** walls (both **fire-rated** and **non-fire-rated**), make sure the walls are constructed of at least 20-gauge steel studs on 16" (41 cm) centers and covered with a minimum 5/8" (15.9 mm) drywall.
3. Do **one** of the following:
 - To install the Specialite™ Patient Light at a wall box, go to “Installing the Specialite™ Patient Light at a Wall Box” on page 3.
 - To install the Specialite™ Patient Light at a Flatwall Headwall System, go to “Installing the Specialite™ Patient Light at a Flatwall Headwall System” on page 8.

Installing the Specialite™ Patient Light at a Wall Box

1. Refer to the as-built drawings, and find the desired location for the Specialite™ Patient Light:
 - On a **3' (91 cm)** unit, refer to figure 1 on page 4.
 - On a **4' (122 cm)** unit, refer to figure 2 on page 4.
2. Do **one** of the following:
 - If the Specialite™ Patient Light is installed over a Horizon® Headwall System gas raceway, measure 71" (180 cm) up from the finished floor (A), and strike the unit's centerline (B).
 - If the Specialite™ Patient Light is **not** installed over a Horizon® Headwall System gas raceway, measure 69" (175 cm) up from the finished floor (A), and strike the unit's centerline (B).
3. Make sure the center of each single gang device box (C) aligns with the unit's centerline (B).
4. From the center of the single gang device box (C), measure up 3" (8 cm), and strike a horizontal line (D) to show the location of the mounting slots in the Specialite™ Patient Light.
5. From the center of one single gang device box (C), measure 3" (8 cm) toward the other device box (C), and strike a vertical line (E).
6. Do **one** of the following:
 - On a **3' (91 cm)** unit, measure 13½" (34.29 cm) along the horizontal line (D) on each side of the vertical line (E), and mark the locations.
 - On a **4' (122 cm)** unit, measure 19½" (49.53 cm) along the horizontal line (D) on each side of the vertical line (E), and mark the locations.
7. From the locations marked in step 6, measure 2" (5 cm) away from the vertical line (E), and mark the locations.
8. Make sure the locations marked in step 6 and step 7 are level.

9. Set the face ring (F) with its long flange up, and install the two #6-32 flat head screws (G) to secure the face ring (F) to the wall box (C) (see figure 3 on page 5).

Figure 3. Specialite™ Patient Light—Wall Box Installation



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10. Set the indirect light into the examination position, and remove the cover from the Specialite™ Patient Light (H).
11. Determine which 2" x 3" (5 cm x 8 cm) knockout (I) aligns with the wall box (C), and remove the correct knockout (I) from the back of the Specialite™ Patient Light (H).

NOTE:

The Specialite™ Patient Light has more than one knockout. Remove the knockout necessary to access the wall box **only**.


12. Install the 2" (5 cm) grommet edging (Y) and 3" (8 cm) grommet edging (Z) around the knockout (I).
13. For **non-fire-rated** or **non-seismic** walls, do the following:



WARNING:

Wear eye protection. Failure to do so could result in eye injury.

- a. Put on the safety goggles.

- b. Select **one** location marked at each end of the horizontal line (D), and drill a 1" (3 cm) hole at the selected locations that are free from obstruction.
 - c. Clean up any debris from drilling.
 - d. Install the toggle wings (J), studs (K), and stud guides (L) at the holes drilled in step b.
 - e. Using the slot in the end of the studs (K), tighten each stud (K) to secure the toggle wings (J).
 - f. Lift the Specialite™ Patient Light (H) into position, and install one slot (M) at each end of the Specialite™ Patient Light (H) on the studs (K).
 - g. Route the building wires from the wall box (C) into the knockout (I).
 - h. Install the 3/8" nuts (N) to secure the Specialite™ Patient Light (H) to the toggle bolts (K).
14. On **fire-rated** or **seismic** walls, do the following:
- a. Lift the Specialite™ Patient Light (H) into position.
 - b. Find the wall stud at each end of the unit, and mark the stud locations on the backplate (O) of the unit.
 - c. Lower the Specialite™ Patient Light (H) away from the wall.
-  **WARNING:**
Wear eye protection. Failure to do so could result in eye injury.
- d. Put on the safety goggles.
 - e. At the locations marked on the backplate (O), drill 1/4" (6.4 mm) holes (AA).
 - f. Clean up any debris from drilling.
 - g. Lift the Specialite™ Patient Light (H) into position, and install the four #12 x 1 1/2" self-drilling screws (P) through the holes (AA) to the backing plate and/or wall studs.
15. Install the two #8 x 7/16" self-drilling screws (Q) to secure the backplate (O) to the flange of the face ring (F).

16. Refer to the wiring hook-up diagram on the cover of the Specialite™ Patient Light (H), and make the necessary wiring connections. Make all field terminations accessible within the Specialite™ Patient Light (H) in accordance with all applicable state and local codes, and the following:
 - National Fire Protection Association (NFPA) 70, *National Electrical Code*®¹ (NEC®²)
 - Canadian Standards Association (CSA) C22.1, *Canadian Electrical Code—Safety Standard for Electrical Installations*
 - CSA Z318.5, *Commissioning of Electrical Gas Equipment and Standards in Health Care Facilities*
 - CSA Z318.7, *Commissioning of Communication Systems in Health Care Facilities*
17. Install the cover on the Specialite™ Patient Light (H).
18. Connect the safety switches to the facility-provided bed receptacle (AB):
 - On a **3' (91 cm)** unit, refer to figure 1 on page 4.
 - On a **4' (122 cm)** unit, refer to figure 2 on page 4.
19. When the bed receptacle (AB) is connected to the safety switches, install the blue faceplate, labelled **For Bed Use Only, No Life Support Equipment**, instead of the standard receptacle faceplate.

1. National Electrical Code® is a registered trademark of National Fire Protection Association, Inc.
2. NEC® is a registered trademark of National Fire Protection Association, Inc.

Installing the Specialite™ Patient Light at a Flatwall Headwall System

1. At the side of the Flatwall Headwall System (R), find and strike the horizontal centerline (B) of the connector (V):
 - On a **3'** unit, refer to figure 4 on page 9.
 - On a **4'** unit, refer to figure 5 on page 9.
2. From the centerline (B), measure up 3" (8 cm), and strike a horizontal line (D) to show the location of the mounting slots in the Specialite™ Patient Light.
3. Do **one** of the following:
 - To install a 3' (91 cm) Specialite™ Patient Light with a Flatwall Headwall System (R) with an 8" (20 cm) raceway, measure horizontally 26 5/8" (67.63 cm) from the side of the Flatwall Headwall System (R), and strike a vertical line (E).
 - To install a 3' (91 cm) Specialite™ Patient Light with a Flatwall Headwall System (R) with a 4" (10 cm) raceway, measure horizontally 22 5/8" (57.47 cm) from the side of the Flatwall Headwall System (R), and strike a vertical line (E).
 - To install a 4' (122 cm) Specialite™ Patient Light with a Flatwall Headwall System (R) with a 4" (10 cm) raceway, measure horizontally 28 3/4" (73.03 cm) from the side of the Flatwall Headwall System (R), and strike a vertical line (E).
 - To install a 4' (122 cm) Specialite™ Patient Light flush against the Flatwall Headwall System, measure horizontally 24 3/4" (62.87 cm) from the side of the Flatwall Headwall System (R), and strike a vertical line (E).
4. Do **one** of the following:
 - On a **3' (91 cm)** unit, measure 13 1/2" (34.29 cm) along the horizontal line (D) on each side of the vertical line (E), and mark the locations.
 - On a **4' (122 cm)** unit, measure 19 1/2" (49.53 cm) along the horizontal line (D) on each side of the vertical line (E), and mark the locations.
5. From the locations marked in step 4, measure 2" (5 cm) away from the vertical line (E), and mark the locations.
6. Make sure the locations marked in step 4 and step 5 are level.

Figure 4. Wall Dimensions—3' Unit

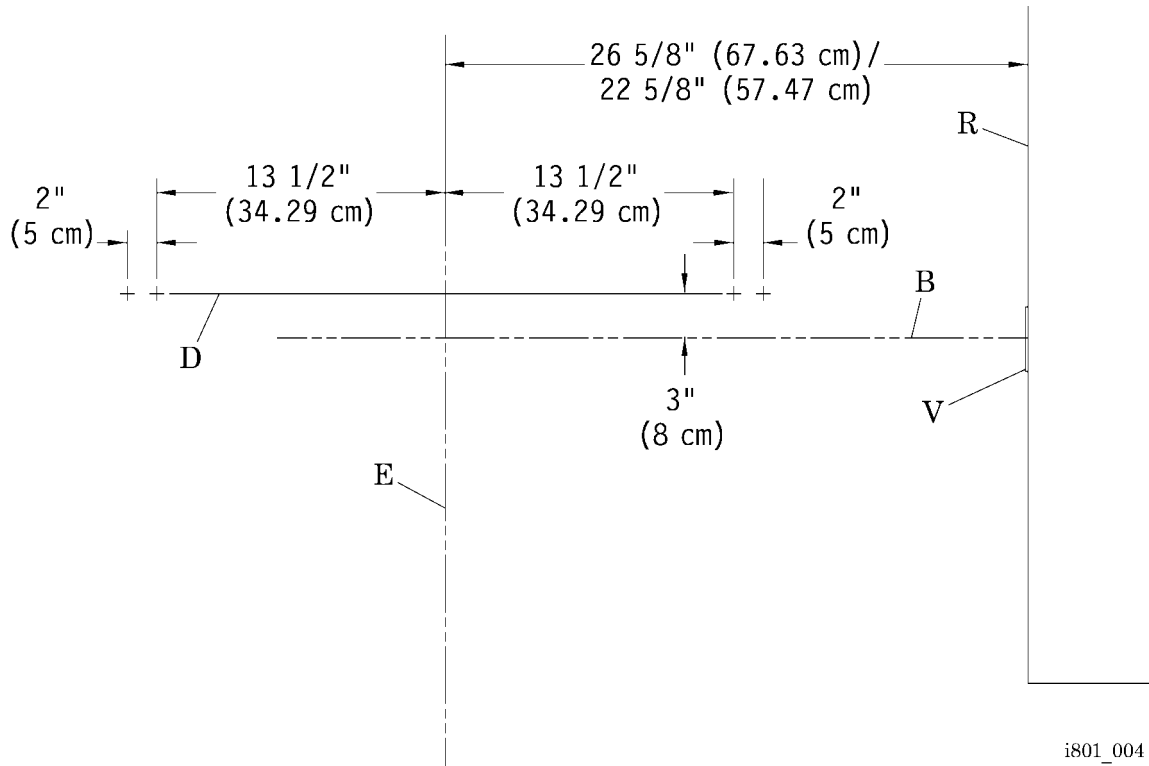
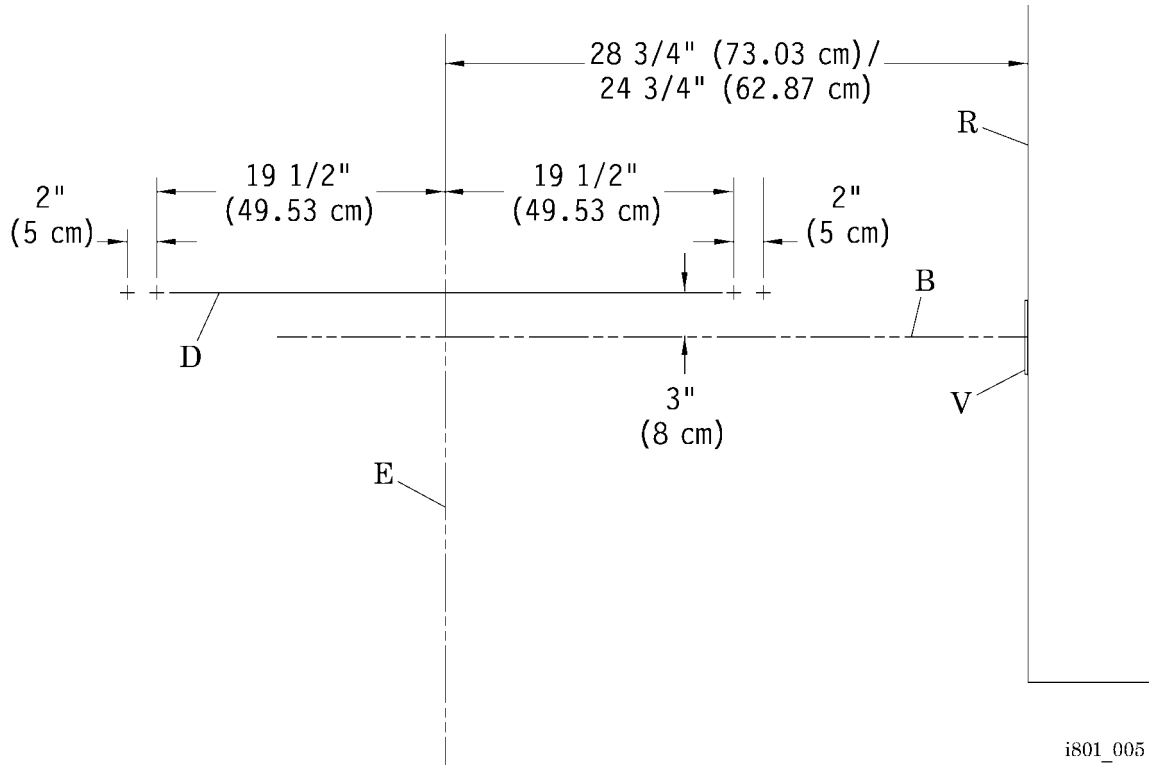
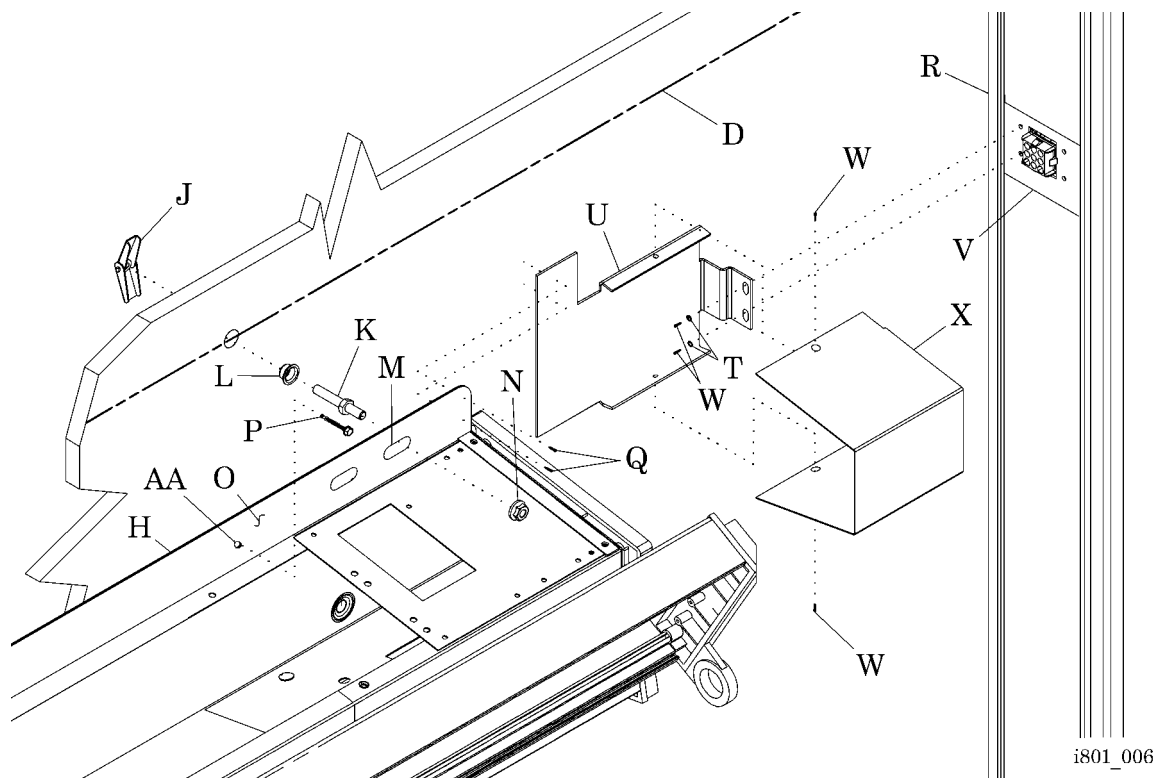


Figure 5. Wall Dimensions—4' Unit



7. Install the two #8 sheet metal screws (W) and lockwashers (T) to secure the raceway backplate (U) at the connector (V) on the Flatwall Headwall System (R) (see figure 6 on page 10).

Figure 6. Specialite™ Patient Light—Flatwall Headwall System Installation




8. For **non-fire-rated** or **non-seismic** walls, do the following:



WARNING:

Wear eye protection. Failure to do so could result in eye injury.

- a. Put on the safety goggles.
- b. Select **one** location marked at each end of the horizontal line (D), and drill a 1" (3 cm) hole in the wall at the selected locations that are free from obstruction.
- c. Clean up any debris from drilling.
- d. Install the toggle wings (J), studs (K), and stud guides (L) at the holes drilled in step b.
- e. Using the slot in the end of the studs (K), tighten each stud to secure the toggle wings (J).
- f. Lift the Specialite™ Patient Light (H) into position, and connect the pigtail connector of the Specialite™ Patient Light (H) to the connector (V) on the Flatwall Headwall System (R).

- g. At each end of the Specialite™ Patient Light (H), install the slot (M) on the stud (K).
 - h. Loosely install the 3/8" nuts (N) to secure the Specialite™ Patient Light (H) to the studs (K).
9. On **fire-rated** or **seismic** walls, do the following:
- a. Lift the Specialite™ Patient Light (H) into position.
 - b. Find the wall stud at each end of the unit, and mark the stud locations on the backplate (O) of the unit.
 - c. Lower the Specialite™ Patient Light (H) away from the wall.
-  **WARNING:**
Wear eye protection. Failure to do so could result in eye injury.
- d. Put on the safety goggles.
 - e. At the locations marked on the backplate (O), drill 1/4" (6.4 mm) holes (AA).
 - f. Clean up any debris from drilling.
 - g. Lift the Specialite™ Patient Light (H) into position, and install the four #12 x 1 1/2" self-drilling screws (P) through the holes (AA) to the backing plate and/or wall studs.
10. On a Flatwall Headwall System **without** a raceway, slide the Specialite™ Patient Light (H) against the Flatwall Headwall System (R).
11. On a Flatwall Headwall System **with** a raceway, do the following:
- a. Slide the Specialite™ Patient Light (H) away from the Flatwall Headwall System (R).
 - b. Install the two #8 sheet metal screws (W) to secure the raceway cover (X) to the raceway backplate (U).
 - c. Slide the Specialite™ Patient Light (H) against the raceway cover (X).
12. Rotate the indirect light section of the Specialite™ Patient Light (H) forward.
13. At the location where the Specialite™ Patient Light (H) overlaps the raceway backplate (U), install the two #8 x 7/16" self-drilling screws (Q) to secure the backplate (O) to the raceway backplate (U).

NOTES:
