Section 5 – Expandable Tent 14 ft x 14 ft NSN 8340-98-106-5201

Main Use

1. The Expandable Tent 14 ft x 14 ft is primarily used for Sleeping Accommodation (Fig 5-1).

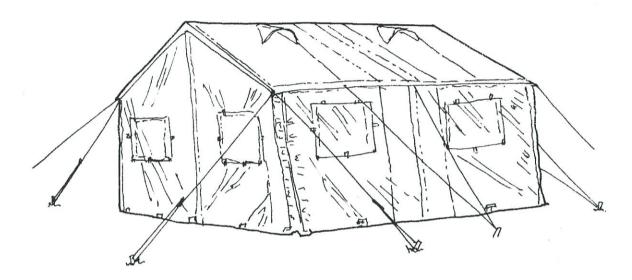


Figure 5-1 — Expandable Tent 14 ft x 14 ft

NZCES

2. Table 5-1 details all the components in NZCES 1489.

Table 5-1 — Base Tent 14 ft x 14 ft

| Item | NSN | Component | Qty |
|------|------------------|--------------------------------------|-----|
| 1 | 8340-98-203-9446 | Tent Section End Outer 14 ft x 14 ft | 2 |
| 2 | 8340-98-106-5202 | Bag, Tent Frame Components | 1 |
| 3 | 8340-98-106-5203 | Bag, Tent Pin | 1 |
| 4 | 8340-98-106-5206 | Bag Tent 1 950 x 1 780mm | 1 |
| 5 | 8340-98-205-6747 | Pole, Tent, 2 083 mm | 12 |
| 6 | 8340-98-205-6748 | Pole, Tent, 1 854 mm | 6 |
| 7 | 5120-98-106-5152 | Hammer, Hand | 1 |
| 8 | 8340-98-104-4559 | Socket, Tent Support, Angle 4 Way | 9 |
| 9 | 8340-98-205-6750 | Tent Liner Roof Inner | 1 |
| 10 | 8340-98-104-4553 | Spike, Base, Tent Pole | 6 |
| 11 | 8340-98-104-3162 | Pin, Tent, Plastic 280mm Long | 16 |
| 12 | 8340-98-106-1978 | Pin, Tent, Plastic 380mm Long | 12 |

3. Table 5-2 details all the components in NZCES 1490.

| Item | NSN | Component | Qty |
|------|------------------|------------------------------------|-----|
| 1 | 8340-98-203-9445 | Tent Section, Middle 14 ft x 14 ft | 1 |
| 2 | 8340-98-106-5202 | Carrier, Tent Frame Components | 1 |
| 3 | 8340-98-106-5203 | Container, Tent Pin | 1 |
| 4 | 8340-98-106-5205 | Cover Tent 1 575 x 1 780 mm | 1 |
| 5 | 8340-98-205-6747 | Pole, Tent, 2 083 mm | 10 |
| 6 | 8340-98-205-6748 | Pole, Tent, 1 854 mm | 4 |
| 7 | 8340-98-104-4559 | Socket, Tent Support, Angle 4 way | 6 |
| 8 | 8340-98-205-6750 | Tent Liner Roof Inner | 1 |
| 9 | 8340-98-104-4553 | Spike, Base, Tent Pole | 4 |
| 10 | 8340-98-104-3162 | Pin, Tent, Plastic 280 mm Long | 12 |
| 11 | 8340-98-106-1978 | Pin, Tent, Plastic 380 mm Long | 8 |

Table 5-2 — Expansion Section 14 ft x 14 ft

- 4. The Extendable Tent is of lightweight canvas construction and simple design. The tent has a minimal number of parts with it being easily transported and erected.
- 5. The frame is a simple slip joint rigid structure, covered by a rot-proofed lightweight canvas cover that is made up of two identical end sections laced together. The tent length can be extended by the addition of canvas extensions and frame (Fig 5-2).

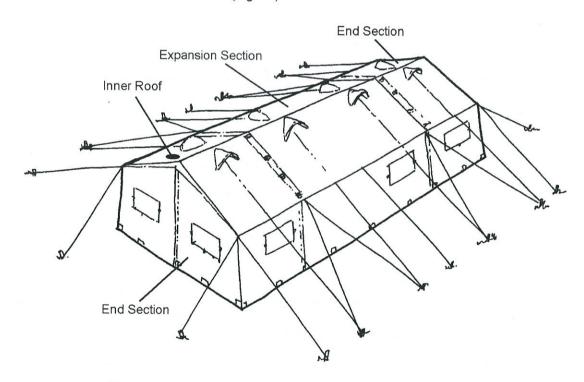


Figure 5-2 — Expandable Tent, 14 ft x 14 ft with Expansion Section

- 6. Each end section consists of:
 - a. End 2 134 x 4 267 x 2 950 mm, Length, Width, and Height.
- 7. The expansion section consists of:
 - a. Expansion 4 267 x 4 267 x 2 950 mm, Length, Width, and Height.

8. The nylon liner is a similar shape to the tent this is hung inside from the frame to improve the tents thermal properties and reduce light emission at night. The exposed surface of the liner has an aluminium coating to assist reflection of light and heat.

Frame Work

9. The framework components used in the construction are detailed in Fig 5-3. The function of each component is described in the following paragraphs. Abbreviated nomenclature is used to facilitate the description of the erection drill, which is detailed in the paragraphs below. The full nomenclatures together with the quantities of each item are detailed in Table 5-3.

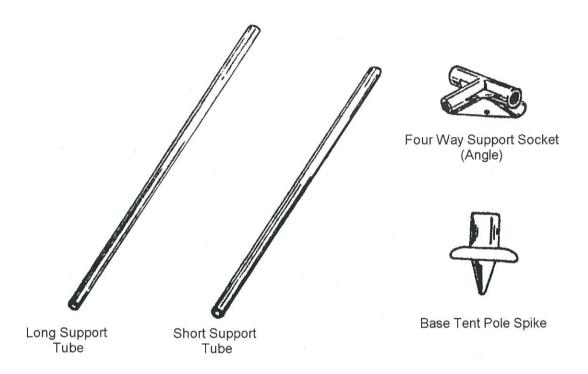


Figure 5-3 — Framework Components

USE OF COMPONENTS

Tent Support Tubes

- 10. These support tubes are the basic components of the framework.
 - a. The 1 854 mm tube is used to form the walls on the 14 ft x 14 ft tent.
 - b. The 2 083 mm tube is used in the roof of the framework.

Socket, Support, 4 Way Angle

11. These sockets are used to join the supports, tent tube, at the ridge and eave line. A total of four supports can be joined by one socket (Fig 5-4).

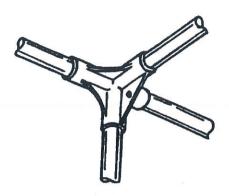


Figure 5-4 — Angle Support Socket

Base, Tent Pole, Spike

12. The base provides a firm footing for the tent poles (supports), as shown in Fig 5-5.

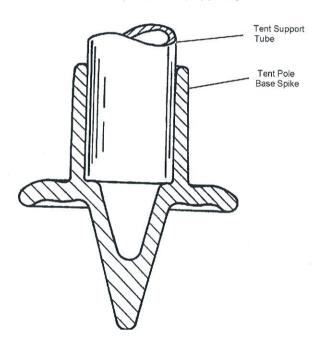


Figure 5-5 — Tent Pole Base Spike

13. The base tent frame is shown in Fig 5-6.

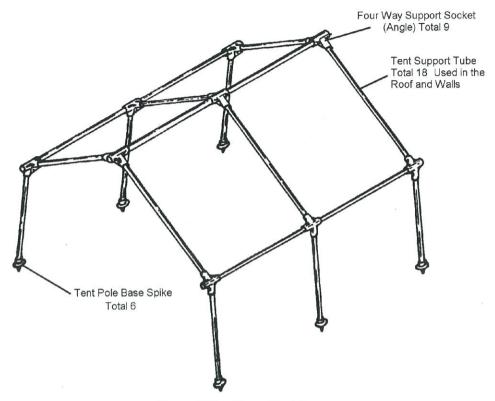


Figure 5-6 — Base Tent Frame

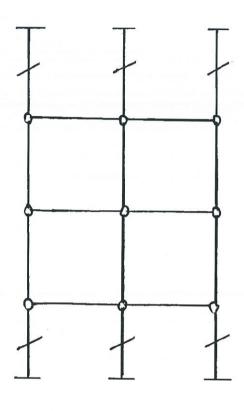
14. The quantities of each component required for a basic tent and for each expansion section are detailed in Table 5-1 and 5-2.

Frame Components Required For Basic Tent and Each Expansion Section

- 15. Figures 5-8 will facilitate identification of the various items when they are mentioned in the erection drill.
- 16. The symbols in Fig 5-7 are represented by the components in Fig 5-8



Figure 5-7 — Component Symbols



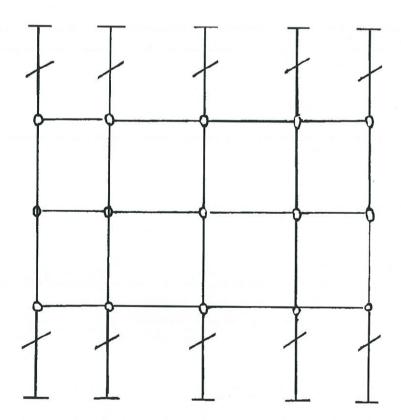


Figure 5-8 — Identification of Roof and Wall Framework

ERECTION

17. An erection party consisting of an IC and three others are required to erect the basic tent, if an expansion is to be incorporated two more personnel are required.

Preliminary Preparation

- 18. Before starting ensure that all items are clean and serviceable.
- 19. Select a clear level site. Should undulations be unavoidable it may be necessary to let some supports and their bases into the ground.
- 20. The erection party should be familiar with Section One which deals with the identification and use of component parts of the tent.
- 21. Lay out all components. Fig 5-8 shows six positions for the tent uprights, and lists the components required at each position. Approximately 6 400 mm should separate the two lines of components.

Assembly of Roof Frame (Side 1)

- 22. Ridge Line. Assemble the ridge line as follows:
 - a. Take two supports from positions 1 and 3 and lay them out centrally between the two lines of components. Allow a gap for the angle support socket.
 - b. Take the angle support sockets from positions 1 to 3 inclusive and place one in the gap and at each end of the supports.
 - c. Starting from one end fit the support sockets to the support tubes. This completes the ridgeline (Fig 5-9).

Note

When assembling supports to support sockets always ensure that the supports penetrate the full depth of the socket base.

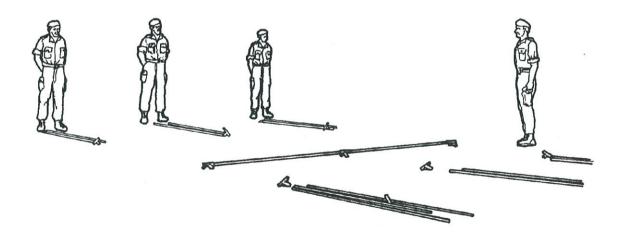


Fig 5-9 — Assembly of Ridge Line

- 23. Ridge Line to Eave Line (Side 1). Assemble the ridge line as follows:
 - a. Approximately 2 134 mm out from and parallel to the ridgeline assemble the eave line, using the same components and procedure as for the ridgeline. Also fit longer lateral support tent tubes to the ridgeline (Fig 5-10).

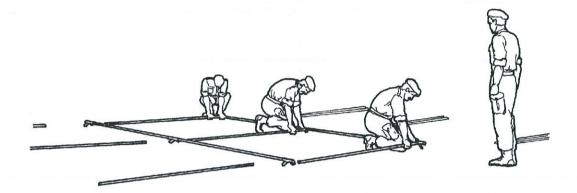


Fig 5-10 — Assembly of Roof Frame (Side One)

b. Move up the eave line and assemble it to the lateral supports. This completes the roof frame on one side of the ridge only (Fig 5-11).

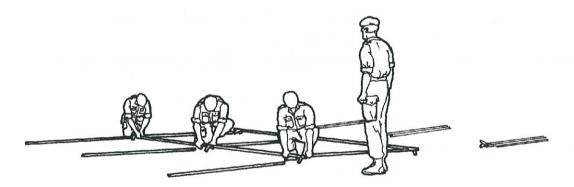


Fig 5-11 — Assembly of Ridge Line to Eave Line (Side One)

- 24. Ridge Line to Eave Line (Side 2). Assemble the ridge line as follows:
 - a. Repeat the procedure as detailed in para 23.a. and b. on the side of the ridgeline as shown in Fig 5-10, 5-11 and 5-12.

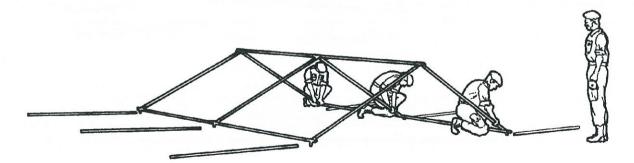


Fig 5-12 — Assembly of Roof Frame (Side Two)

Assembly of Wall

25. **Eave Line.** Lay out three lateral supports from positions 4 to 6 (Fig 5-8). Lift the roof frame at the eave line, and fit the supports (Fig 5-13).

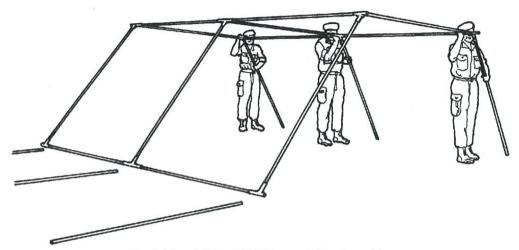


Fig 5-13 — Fitting Wall Supports To Eave Line

Fitting the Cover and Roof Inner

26. Cover. Fit the cover as follows:

- a. Drive pins approximately seven feet from each corner of the frame. Secure with pins temporarily to allow central positioning of cover (Fig 5-14).
- b. Lay out the cover sections, inside upward, and line up ready for lacing the two end sections.
- c. Starting from the ridgeline of the cover, lace up the roof sections to the eave line only. Ensure that the weather flaps (provided on the outside of the cover to conceal the lacing) are tied.
- d. Pull the assembled cover over the frame and starting from the eave line, lace up as much of the wall and the canvas as possible at this stage. Secure the doorway, tie-down the wall and corner weather flaps, adjust the roof cowls with the cords provided. Secure the eave guy ropes to the pins.

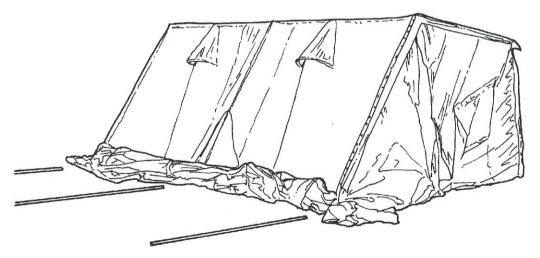


Fig 5-14 — First Stage of Fitting Cover and Roof Inner

Inner Roof

- 27. When attaching the Roof Inner, aluminium side downwards, ensure the seams are parallel with the ridge to eave tube supports, and secure the metal hooks along the center ridge to the hole in the tent frame 4 way angle socket.
- 28. Working from ridge to eaves, fasten all tape ties and fix hanging cords to the ridge to eave tube supports.
- 29. Complete the Tent Section Roof Inner fixture by securing roof inner corner hooks to the hole in eave brackets.

Assembly of The Wall (Side 2)

30. Lift the roof frame at the eave line, and fit the supports (Fig 5-15). When the wall is completed, secure the guy ropes.



Fig 5-15 — Fitting Wall Supports To Eave Line

Completion of Erection (Side 2)

31. Lay out and fit three Base Tent Pole Supports.

Completion of Erection (Side 1)

- 32. Continue lacing the outer cover, attaching of the roof inner and tying weather flaps on this side.
- 33. Lay out and fit three Base Tent Pole supports.
- 34. Complete the lacing of the outer cover and the tying of the weather and window flaps as required.

Guying and Pegging Down

35. Line up the wall supports lengthwise on both sides; drive in the tent pins and secure the guy ropes. Starting from one end work down both sides simultaneously (Fig 5-16).

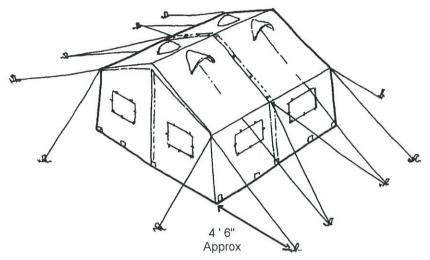


Fig 5-16 — Pin Position and Guy Ropes Layout

- 36. Ensure that all doorways are clipped together, insert the door and wall pins, and tie the inside of the outer cover to the frame.
- 37. The tent is now erected and ready for use.

Fitting the Walls and Ends Liners

- 38. When attaching the End, Inner, the aluminium side is to face into the tent, ensure the end is horizontal and secure the centre top metal hook to the hole in the top end 4 way angle socket.
- 39. Attached the corner metal hooks to the end corner 4 way angle sockets.
- 40. Complete the End Inner fixture, by securing from the ridge line down both end support tubes, place the fastening tapes around support tubes and close all press studs.
- When attaching the Wall, Inner, the aluminium side is to face into the tent, ensure the top of the wall with the tapes attached is parallel with the eave support tubes.
- 42. Working along the eave line from one end, place the fasten tapes around the support tubes and close the press studs.
- 43. Complete the Wall Liner fixture, by placing the fasten tapes around the wall upright support tubes and closing the press studs.

USER MAINTENANCE

Care Of Tent

- The tent cover is made of rot-proofed material. If it is necessary to dismantle the tent when wet, the cover must be dried at the earliest opportunity to prevent fungus growth and spontaneous combustion.
- 45. When lacing the cover sections together it is essential that only personnel wearing rubber sole boots be permitted to walk on these sections. Leather or studded soles will damage the material.
- 46. If damage (burrs, etc) should occur to the ends of the tent supports or to the support sockets, this can be removed by filing. Avoid excessive filing as this can cause wear, which will result in poor connections.

METHOD OF FOLDING

- 47. After striking the tent and before folding ensure that all textile sections are free from foreign matter and they are dry.
- 48. The method of folding the textile sections is illustrated in Figures 5-17 to 5-21.
- 49. Correct folding facilitates handling and affords quick identification of the various sections. A correctly folded section will have the NATO Stock Number and Nomenclature displayed on the outer surface.

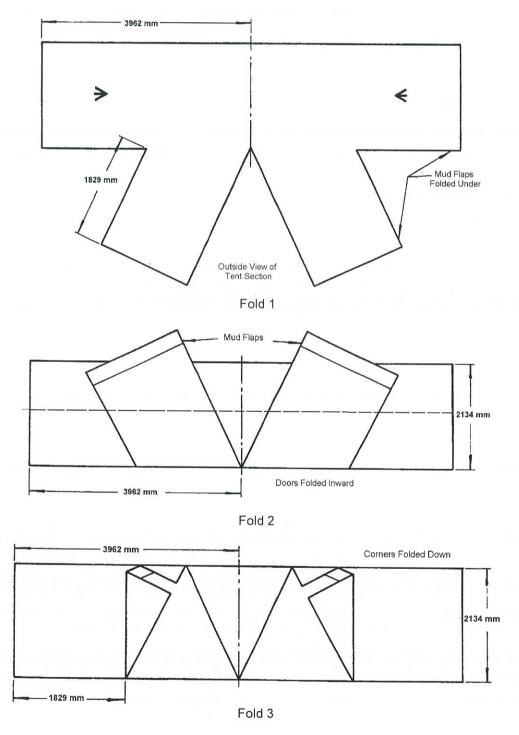


Fig 5-17 — Method of Folding 14 ft x 14 ft End Outer Section

533 mm

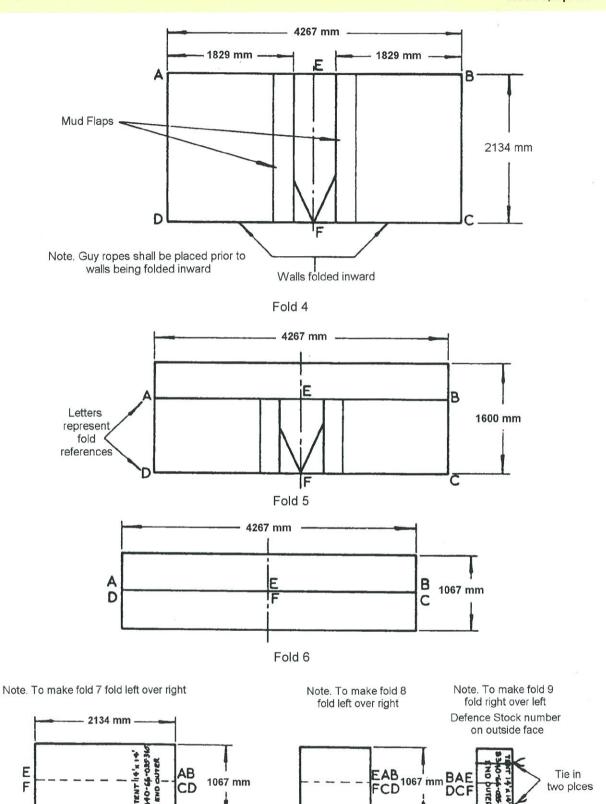
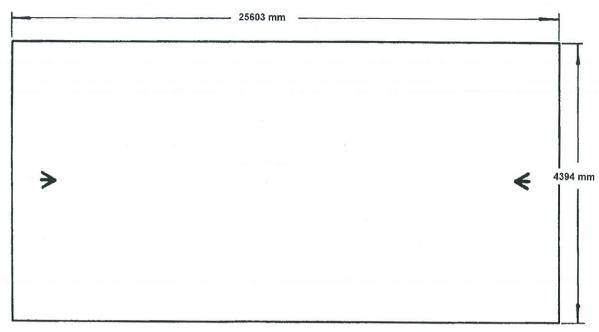


Fig 5-18 — Method of Folding 14 ft x 14 ft End Outer Section

Fold 7, 8 and 9

1067 mm



Outside of Tent Section

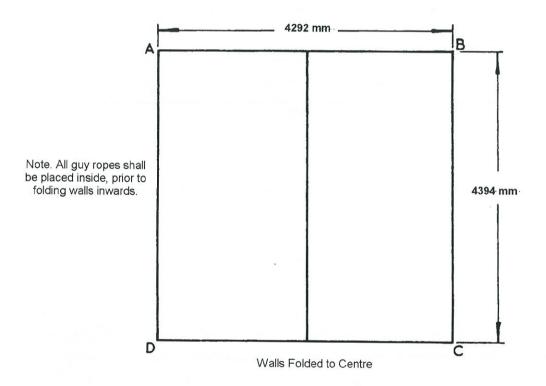


Fig 5-19 — Method of Folding 14 ft \times 14 ft Expansion Section