

# Rescue Litters User's Manual





User Information shall be provided to the user of the product. NFPA Standard 1983, incorporated into the 2022 edition of NFPA 2500, recommends separating the User Information from the equipment and retaining the information in a permanent record. The standard also recommends making a copy of the User Information to keep with the equipment and that the information should be referred to before and after each use. Additional information regarding litters can be found in NFPA 1500 and NFPA 1858 and NFPA 1983, incorporated in the 2022 edition of NFPA 2500.

Retain this manual for future reference. Include it with the product in the event of transfer to new users. Additional copies are available upon request from Customer Support or can be downloaded at www.cmcpro.com.



MEETS THE LITTER REQUIREMENTS OF NFPA 1983, INCORPORATED IN THE 2022 EDITION OF NFPA 2500.

#### 1

#### **Safety Information**

#### 1.1 Warnings

The following are warnings in this manual:



Serious injury or death may result from the improper use of this equipment.

This equipment has been designed and manufactured for use by experienced professionals only.

Do not attempt to use this equipment without prior training.

Thoroughly read and understand all labels and interructions before use.

An unrestrained or improperly restrained patient can suffer injuries. Always secure the patient in the litter with a restraint system suitable to the situation.

An unattended patient can become injured. Stay with the patient at all times.

Attaching improper or inappropriate items to the litter can cause injury and damage. Use only manufacturer approved items with the litter.

Modifying the litter can cause injury and damage. Use the litter only as-sold by the manufacturer.

Use, inspect and repair only in accordance with manufacturer's instructions.

Return the litter to the manufacturer or to a qualified inpsection person/center if the equipment is dropped, damaged or impact loaded.

#### 1.2 Bloodborne Disease Notice

OSHA (Occupational Safety and Health Administration) requires employers to protect workers from workplace exposure to bloodborne diseases such as HIV-1 and hepatitis. To reduce the risk of exposure when using the litter, follow disinfecting and cleaning instructions in this manual.

#### 1.3 Safety Labels

Labels place important information from the Users' Manual on the litters.

Read and follow label instructions. Replace worn or damages labels immediately. New labels are available from the manufacturer.

The load limit and certification labels shown are affixed to the litter.





Serial No: XXXXXXX Load Limit: 1,134 kg / 2,500 lb





NFPA 2500 (1983), 2022 ED.

### 2 Operator Skills and Training

#### 2.1 Skills

Tenders using the litter need:

- A working knowledge of emergency patient-handling procedures;
- The ability to assist the patient;
- A complete understanding of the procedures described in this manual.

#### 2.2 Training

Trainees need to:

- Follow a training program designed or approved by their training officer;
- Read this manual BEFORE and AFTER each use. For additional information, contact CMC customer service;
- Practice with the litter before using it in regular service;
- Be tested on their understanding of the litter;
- Record their training information.

#### **3** About The Litter

#### 3.1 General Specifications

High-density polyethylene netting: -65°F /-54°C to +200°F /+93°C

VERTICAL BREAKING STRENGTH: 24.9 kN
HORIZONTAL BREAKING STRENGTH: 13.7 kN

#### **Restraint Webbing**

Tensile Strength: 975 lb / 442 kg Load Rating: 500 lb / 227 kg

#### **Restraint Buckles**

Minimum Tensile Load: 4,000 lb / 1,814 kg

CMC reserves the right to change specifications without notice.

Length	83.5 in	212 cm	
Width	23 in	58 cm	
Width (Split-Apart)	23.5 in	60 cm	
Depth	7.25 in	18 cm	
Depth (Split-Apart)	7.5 in	19 cm	
Weight (SS)	30 lb	14 kg	
Weight (SS, Split-Apart)	33 lb	15 kg	
Weight (TI)	14 lb	6.3 kg	
Weight (TI, Split-Apart)	17.5 lb	7.5 kg	
Rated Load Limit	2500 lbf	11 kN	



Untrained tenders can cause injury or be injured. Permit only trained personnel to operate the litter.

**IMPORTANT:** Rescue procedures using ropes, harnesses, bridles and other Personal Protective Equipment require special skills and are potentially hazardous activities. No rescue personnel should attempt such rescue procedures unless he or she has received professional instruction and training.

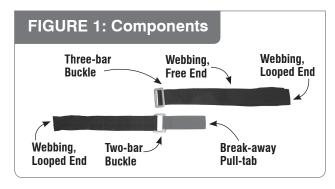
#### 4.1 About the Restraints

A total of four restraints are included with your purchase of this litter.

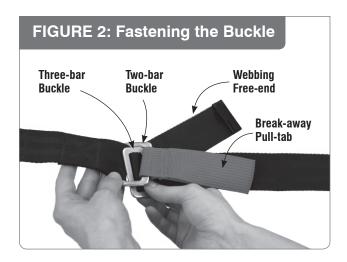
These restraints are to supplement what you will typically use to tie-in a patient in a high-angle situation. We have made them to a suitable strength in order to complement your own system of webbing, cord or tie-in system. These restraints are only for securing the patient into the litter, and are not to be used for lifting or for any other purpose. Additional information regarding life safety equipment can be found in NFPA 1500, Standard on Fire Department Occupational Safety and Health Program, and NFPA 1983, Standard on Life Safety Rope and Equipment for Emergency Services.

# 4.2 Fastening and Tightening the Restraints

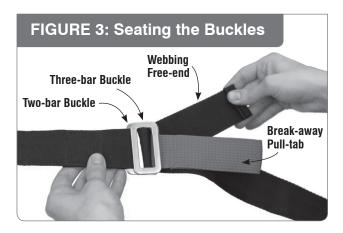
1. The strap with the three-bar buckle is constructed with a looped end that attaches to the litter, and a free end that is used to tighten the restraint (Figure 1).



2. Pass the three-bar buckle and webbing upward through the opening in the two-bar buckle (Figure 2).



3. Pull slightly on the free end of the webbing to firmly seat the three-bar buckle on top of the two-bar buckle (Figure 3).



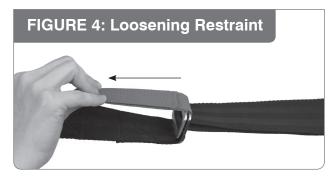
4. Tighten the restraint by pulling on the free end of the webbing.



An unrestrained or improperly restrained patient can suffer injuries. Always secure the patient in the litter with a restraint system suitable to the rescue operation.

## 4.3 Loosening and Unfastening the Restraints

1. To loosen a restraint, pull the breakaway tab toward the buckle (Figure 4). Continue pulling until the restraint is as loose as desired.



2. To unfasten the restraint, first loosen as in step number 1, then angle the three-bar buckle and pass it downward through the opening in the two-bar buckle (Figure 5).



#### 4.4 Attaching the Restraints

The top edge of the high-density polyethylene netting is shaped with coves to provide points where restraints can easily be fastened to the lower rail of the litter (Figure 6).



Select attachment points that are appropriate for effective securing of the patient, as well as for working together with your own fastening system.

Attach the supplied restraints as follows:

- Unfasten the buckle to separate the restraint straps;
- 2. Starting outside the litter, pass the looped end of the strap inward between the litter rail and the netting at a chosen attachment point (Figure 7);



3. Thread the buckle through the restraint loop (Figure 8) and pull until the loop is tight around the litter rail (girth hitch);



4. Attach the remaining strap to the opposite side of the litter following steps 2 and 3.

#### 5.1 Before Placing the Litter in Service

- Personnel who will work with this litter need to read this manual BEFORE and AFTER each use.
- If using the supplied restraints, attach them as instructed in *Attaching the Restraints*.
- Confirm that the litter, restraints and mesh netting are in good condition. Follow instructions in *Inspecting the Litter* in this manual.

#### 5.2 General Guidelines for Use

- Using the litter requires proper training for all litter tenders (attendants). In most situations, litter tenders may want or need additional help. For information about placement and direction of tenders, see Carrying the Litter in this manual.
- Follow standard emergency patient-handling procedures when using the litter.
- Stay with the patient at all times.
- Always use the patient restraints provided, as well as a supplimentary restraining system as per your training and team protocols, and the situation.
- Personnel using the litter in high-angle environments are responsible for learning the proper techniques involved, and for selecting the equipment and procedures best suited to the rescue situation.

#### 5.3 Carrying the Litter

Carrying the litter requires a minimum of two tenders. Additional personnel will be helpful or even needed in most situations. Use an even number of personnel and position them to keep the litter as even as possible.

#### **Using Additional Help**

Tenders should maintain control of the litter and direct any helpers.

#### 5.4 Sliding the Litter

Slide the litter on its runners only over smooth surfaces. Avoid rocks, stumps, branches or other hazards that could penetrate the netting, or cause discomfort or injury to the patient or Litter Wheel.

#### 5.5 Transporting the Litter on a Cot

Use the cot restraints to secure the litter to the cot.



An unrestrained or improperly restrained patient can suffer injuries. Always secure the patient in the litter with a restraint system suitable to the rescue operation.

#### 5.6 Using High-Angle Rescue Techniques

High-angle and rope-access rescue can involve any combination of ropes, winches, pulleys, litter bridles, belay devices any many other specialized items and devices too numerous to mention. Proper and safe use of these tools requires professional instruction and training.

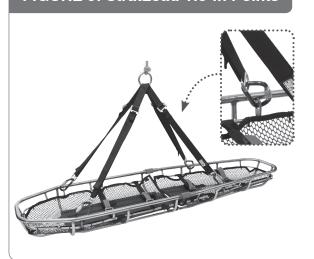
When using high-angle or rope-access equipment with the litter, ensure the equipment has an adequate load-rating.

During a high-angle rescue, the litter may be oriented vertically, horizontally or in other positions. Secure the patient in the litter so that they do not slip in any direction (or inadvertently come out of the litter).

#### **Tie-In Points**

The Litter has several Tie-In points where carabiners or ropes may be attached to the upper rail. In addition, this litter incorporates a patented StrātLoad™ feature which allows for dedicated attachment points when being rigged with a four-point litter-bridle for a horizontal raise or lower.

#### FIGURE 9: StrātLoad Tie-In Points



**IMPORTANT:** Personnel using the litter in high-angle rescue situations are responsible for knowing the techniques involved and for selecting the equipment and procedures best suited to each rescue situation.



Improper operation can cause injury. Operate the litter only as described in this manual.



An unattended patient can be injured. Stay with the patient at all times.

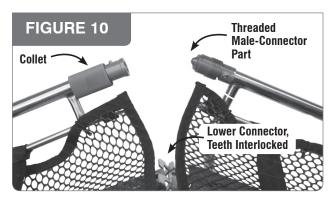
#### 5.7 Using the Split-Apart Feature

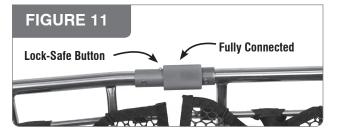
The Split-Apart litters offer very fast assembly time, and there are no pins to place. Before starting, be sure to clean all parts of dirt, mud, snow, and debris. To assemble:

- 1. Face the two open ends of the litter toward each other;
- Lift the open ends simultaneously to about a 30° angle, and slide the two parts together, interlocking all of the teeth of the Bottom Connectors:
- 3. Lower the inter-locked parts to the floor;
- 4. Ensure Upper Connector parts mate;
- 5. Turn Collets onto the opposing threaded parts of the Upper Connectors. Ensure these Collets are snug, and that there are no threads showing & Lock-Safe button is exposed.

To disassemble, simply depress Lock-Safe button & reverse the above sequence.

Please Note: It is imperative that throughout the operation of this litter during a rescue or in practice, that you check the integrity of the connection. If you see threads on the Upper Connector, re-tighten the Collets.





#### Carrying, Maintenance and Storage

#### 6.1 Carrying

During use, carrying and storage keep the equipment away from acids, alkalis, exhaust emissions, rust and strong chemicals. Do not expose the equipment to flame or high temperatures. Carry the equipment where it will be protected as the equipment could melt or burn and fail if exposed to flame or high temperatures. Store in a cool, dry location. Do not store where the equipment may be exposed to moist air, particularly where dissimilar metals are stored together.

#### 6.2 Maintenance Schedule

The litter requires regular maintenance. Set up and follow a maintenance schedule, such as provided by the table below. This table represents minimum maintenance, and you can modify your own program based on your needs.

When using maintenance products, follow the manufacturer's directions and read the manufacturer's material safety data sheets.

	Each Use	As Needed	Each Month
Disinfecting (See 6.3)	•		
Cleaning (See 6.3)		•	
Inspecting (See 6.4)		•	•

# 6.3 Disinfecting and Cleaning the Restraints

- 1. Remove restraints from litter.
- Buckle restraints before cleaning. This helps prevent damage to buckles or washing machine.
- Place buckled restraints inside a mesh bag (not supplied) and place in an industrial washing machine.

- Launder restraints in warm water, using a disinfectant soap and gentle agitation. Do not use bleach.
- 5. Remove restraints from mesh bag and hang to dry. Do not put restraints into dryer.
- 6. Attach clean, dry restraints to litter as instructed in Section 4.

#### 6.4 Disinfecting and Cleaning the Litter

Wipe or spray all surfaces of litter and netting with disinfectant.

Follow disinfectant manufacturers' directions. CMC recommends inspecting the litter for obvious damage as you disinfect it.

Hand clean the litter and netting with a mild detergent in warm water. Rinse well, and dry with a towel.

**IMPORTANT:** Disinfectants and cleaners containing bleach, phenolics, or iodines can cause damage to the restraints and litter. Disinfect and clean only with products that do not contain these chemicals.

#### 6.5 Inspection

Inspect the equipment according to your department's policy for inspecting life safety equipment. Inspect the equipment prior to entry into service, after each use, and at least once every 12 months. The equipment should be thoroughly inspected by an inspector that meets your department's training standard for inspection of life safety equipment. Keep a record of the date, person performing the inspection and results, as well as the date of first use, name of users and any other pertinent information necessary to keep accurate track of the equipment's usage history in the

equipment log or on a tag that attaches to the equipment. Each user should be trained in equipment inspection and should inspect the equipment before each use.

Inspect the equipment for cracks, sharp edges, dents, corrosion, burrs or excessive wear. Minor nicks or sharp spots may be smoothed with emery cloth. If any of the above is noted, or if the equipment has been subjected to shock loads, fall loads, or abuse other than normal use, remove the equipment from service and destroy it. If there is any doubt about the serviceability of the equipment, remove the equipment from service and destroy it.

The service life of equipment used for rescue depends greatly on the type of use and the environment of use. Because these factors vary greatly, a precise service life of the equipment cannot be provided.

Have your stations' or services' maintenance personnel check the following BEFORE and AFTER each use:

- All components should be present;
- Weld joints should be free of cracks or any other sign of breakage;
- Litter frame (top and lower rails, runners, ribs) should be free of dents, cracks or unintentional bends;
- High-density polyethylene netting should be free of breaks and tears, and should be securely fastened to the lower rail;
- Blue back support should be securely fastened in place;
- Warning labels should be clear and legible for all users to see and read:
- Restraint webbing should be in good condition with no cuts or frays;
- Restraint buckles should be free of visible damage, and should operate properly.

If inspection shows damage or excessive wear, remove the litter from service until appropriate repairs are completed.

### 7 Repair and Warranty

All repair work shall be performed by the manufacturer. All other work or modifications void the warranty and releases CMC from all liability and responsibility as the manufacturer.



Improper maintenance can cause injury.

Maintain the litter only as described in this manual.

### **Device Periodic Check Sheet**

No.	Date	Reason for Check	Notes (damage, defects, excessive wear or other relevant data)	Check Results	Name and Signature of Competent Person Performing Check	Date of Next Check
1		<ul><li>Periodic check</li><li>Additional check</li></ul>		<ul> <li>Device suitable for use</li> <li>Device NOT suitable for use</li> <li>Secondary check required</li> </ul>		
2		<ul><li>Periodic check</li><li>Additional check</li></ul>		<ul> <li>Device suitable for use</li> <li>Device NOT suitable for use</li> <li>Secondary check required</li> </ul>		
3		<ul><li>Periodic check</li><li>Additional check</li></ul>		<ul> <li>Device suitable for use</li> <li>Device NOT suitable for use</li> <li>Secondary check required</li> </ul>		
4		<ul><li>Periodic check</li><li>Additional check</li></ul>		<ul> <li>Device suitable for use</li> <li>Device NOT suitable for use</li> <li>Secondary check required</li> </ul>		
5		<ul><li>Periodic check</li><li>Additional check</li></ul>		<ul> <li>Device suitable for use</li> <li>Device NOT suitable for use</li> <li>Secondary check required</li> </ul>		
6		<ul><li>Periodic check</li><li>Additional check</li></ul>		<ul> <li>Device suitable for use</li> <li>Device NOT suitable for use</li> <li>Secondary check required</li> </ul>		
7		<ul><li>Periodic check</li><li>Additional check</li></ul>		<ul> <li>Device suitable for use</li> <li>Device NOT suitable for use</li> <li>Secondary check required</li> </ul>		



CMC Rescue, Inc.
6740 Cortona Drive
Goleta, California 93117 USA
805-562-9120 / 800-235-5741
cmcpro.com
ISO 9001 Certified
Control Number 7261XXIN01\_Rev00