



Installation & Maintenance Manual

INDOOR CLIMBING ROPES

CR / CRP / CRD SERIES

GENERAL POLICY ON WARRENTY INFORMATION

JAMMAR Manufacturing Company Inc. provides you with the finest equipment possible. All products are fabricated from top-quality materials and made to our own high standards in our own facilities. JAMMAR'S guarantee is as follows: Seller warrants to the customer that the products herein sold are free of defects in material and workmanship for a period of one (1) year from date hereof. This warranty is Seller's sole warranty here under and does not cover, and is intended to exclude any liability on the part of the Seller whether under this warranty or under any warranty implied by law, for any indirect or consequential damages for breach hereof or thereof. Any and all warrants implied by law shall be limited to one (1) year from the date hereof. Seller's sole obligation under this warranty shall be to repair, or at its option, replace, at its expense, any defective part or parts. Buyer must receive Seller's written approval to return part or parts from inspection and no charges for repair will be accepted by Seller without its written authorization. Seller specifically excludes any warranty expressed or implied for any product which has been manufactured according to buyer's own design, prints, or specifications. Installation of our products is the responsibility of the Buyer who assumes any liability for damage to property or injury. While every attempt is made to embody the highest degree of protection in all equipment, we cannot, however, guarantee freedom from injury. The user assumes all risk of injury due to use. All merchandise is sold on this condition, which no representative of the company can waive or change. Equipment should be inspected periodically by user for damage and wear and tested for stability. All sporting and PE activities carry the risk of injury to the participants. Improperly maintained equipment and inadequately supervised programs are significant contributing factors. All equipment must be thoroughly inspected and maintained to reduce the risk to the users.

INSTALLATION INSTRUCTIONS: INDOOR CLIMBING ROPES

OVERVIEW:

Climbing ropes have always been one of the most popular training aids to improve overall physical fitness and muscle tone, particularly for upper arms and shoulders. Climbing ropes are a popular choice to gain strength, grip, and arm coordination skills for wrestling, gymnastics, etc. Students can set personal goals and progress at their own skill level.

TYPES OF ROPES:

Jammar is proud to offer 3 outstanding choices of rope material for your program. CR/CRP/CRD Series Indoor Climbing Ropes are all offered in 1.25", 1.5" or 2" sizes and include a heavy-duty metal eye fitting for easy installation to the ceiling structure. Rope choices are as follows:

Natural Manila Rope (CR Series): The most popular, traditional natural fiber rope. Extremely durable rope absorbs perspiration facilitating better grip with very little splinters. We select only the highest quality Grade A manila rope, minimizing any surface roughness. Natural manila fiber ropes are not recommended for humid environments and are extremely susceptible to degradation when exposed to water.

Polypropylene "Unmanila" Rope (CRP Series): Specially manufactured polypropylene rope looks and feels like natural fiber ropes while eliminating many undesirable characteristics of natural fiber ropes. Polypropylene ropes have superior strength and are 2/3 the weight of natural manila ropes. Particularly popular in elementary level facilities.

Poly Dacron (aka Polyplus) Rope (CRD Series): An extremely soft and "cottony" feeling rope which offers durability of a white polyester (Dacron style) outer coat with a strong lightweight polypropylene core. Polyplus ropes are soft, flexible, and textured for better gripping and have excellent UV resistance characteristics.

CHOOSING THE PROPER LOCATION TO BE INSTALLED:

Climbing ropes must be hung from structurally safe framework which will exceed any load placed on the rope. Most beam and ceiling framework in institutional buildings will meet this criterion, however, always confirm this with your building plans and/or building engineer. You will want to raise your rope up out of the reach or path of other students or activities when the net is not in use so select an area accordingly. Locate the rope no further than your rope length away from the wall. This allows a pulley installed up on the wall to retract the rope towards the ceiling and out of the way (refer to Jammar's Net Hoist Systems, RN-1 or WLBH-2, for additional information). Do not place the rope too close to a wall where objects on the wall can injure or interfere with a climber. Do not let the rope contact or rub against other objects which will cause wear. You will need mats around the climbing area and a thick landing mat directly under the climbing rope for safety purposes. CN/CNP/CND Series climbing ropes are for indoor use only and should never be used outdoors. Use of this equipment other than intended may be hazardous.

RESPONSIBLE SAFE WORK LOADS & ALLOWABLE LIMITS

Allow for at least a 5:1 safety ratio

300 lb per climber



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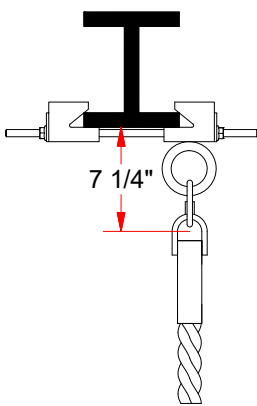
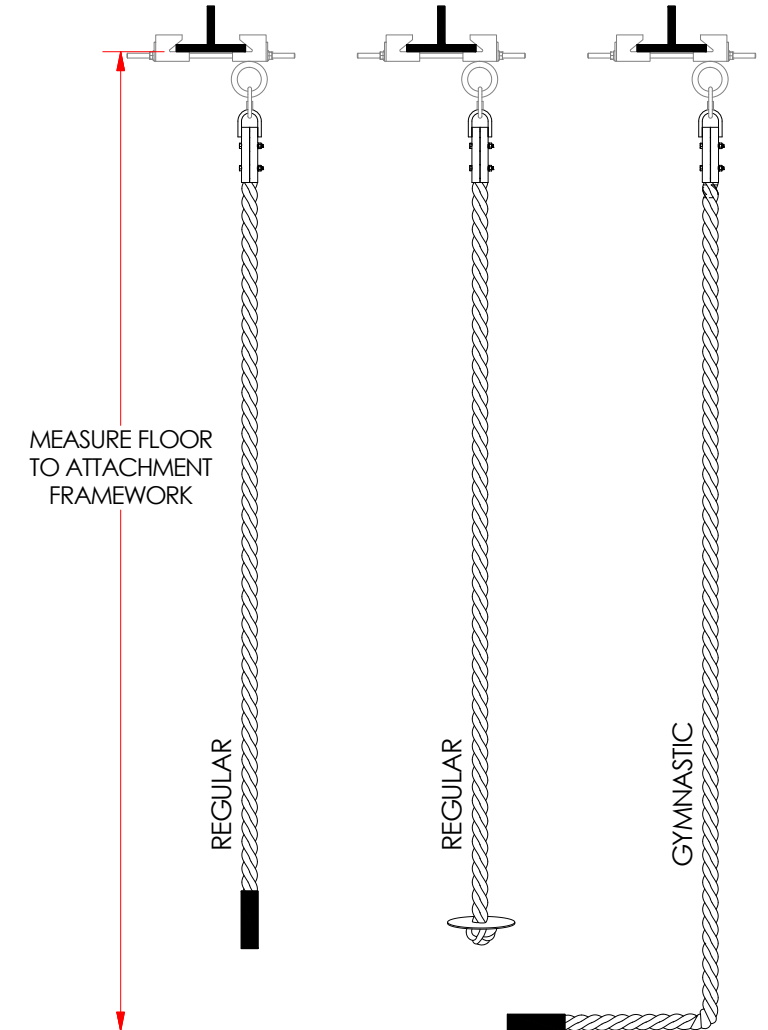
INSTALLATION INSTRUCTIONS: INDOOR CLIMBING ROPES

DETERMINING THE CLIMBING ROPE LENGTH:

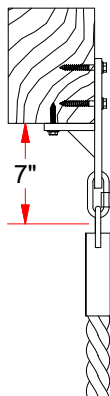
When determining the length of climbing rope required, you must consider the specific application:

- For regular gymnasium applications, the climbing rope should be the distance between the floor and the bottom of the overhead girder minus 1'. See beam clamp note below.
- For gymnastic applications, the climbing rope without bottom knots should be long enough so that at least 42" of rope is on the floor. Measure the distance from the floor to the attachment framework and add 3'-6". See beam clamp note below.

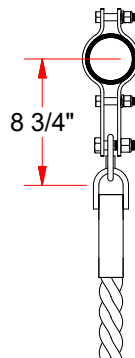
Beam Clamp Note: When calculating the climbing rope length, consider the depth of the specific beam clamp being used to hang the climbing rope. Refer to the specific beam clamp instructions for proper and safe installation instructions. A few examples of the beams clamps are shown below.



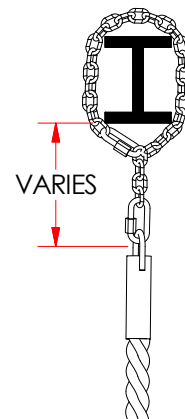
A-312
BEAM CLAMP



A-1
WOOD CLAMP



A-2
PIPE CLAMP



CAS-2
ATTACHMENT SLING



INSTALLATION INSTRUCTIONS: INDOOR CLIMBING ROPES

CLIMBING ROPE SAFETY AND STORAGE ACCESSORIES:

Jammar offers various climbing rope safety accessories. The accessories are universal for any indoor climbing rope and are highly recommended to ensure safe climbing for any facility. Contact Jammar for additional information or refer to each product's specific specification sheet.

SCA-1, Safety Cable Attachment:

Jammar recommends the purchase of our Safety Cable Attachment for use with newly purchased and/or existing Jammar climbing ropes. If, for any reason, installation or the rope clamp fails, the attachment cable will provide an immediate backup hanger and prevent the rope from falling. The SCA-1 is specifically designed as a redundant safety feature and is not intended for use as the primary suspension method.

TMB-20, Climbing Rope Tamborine:

The Climbing Rope Tamborine easily clamps to any climbing rope and can be used to limit climbing heights for age, skill, and testing concerns. The TMB-20 prevents climbers from reaching the attachment hardware or any other equipment in the gymnasium (such as HVAC, lights, speakers, fans, etc).

RN-1, Rope / Net Hoist:

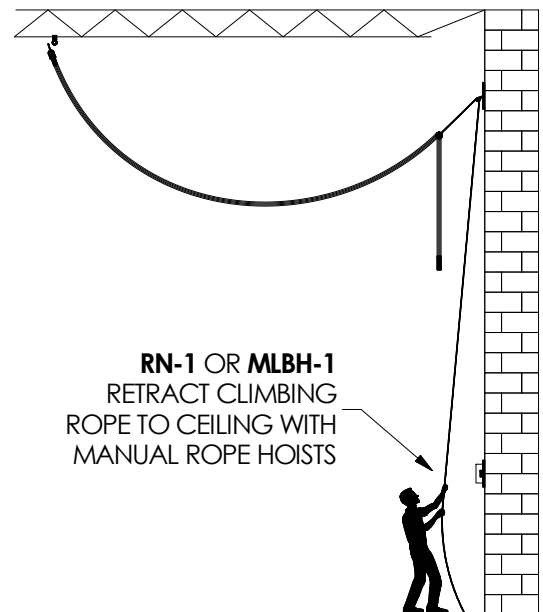
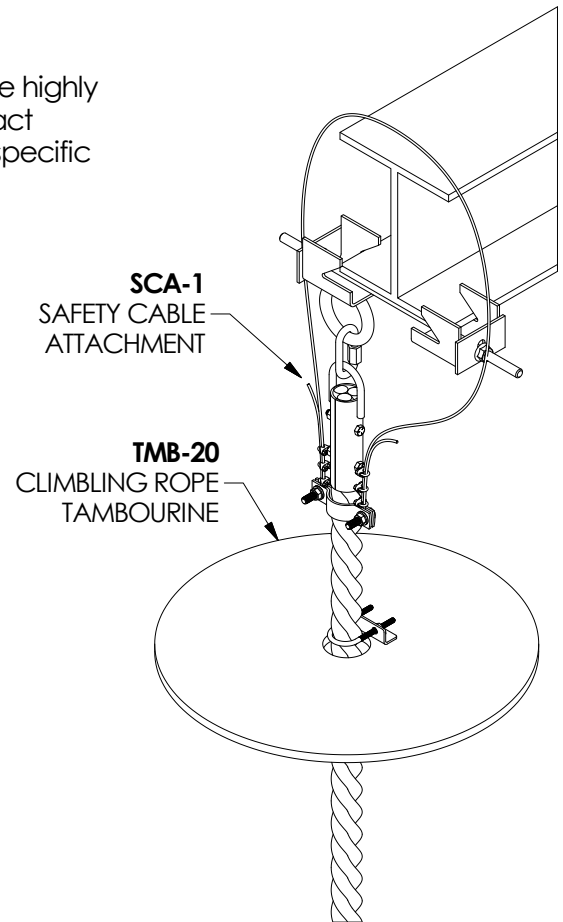
The Rope / Net Hoist is a manual hoist system to raise climbing ropes, cargo nets, or other climbing components to the wall or ceiling to prevent unauthorized use or to get the equipment out of the way of other activities.

MLBH-1, Rope / Net Hoist with Metal Lock Box:

The Rope / Net Hoist with Metal Lock Box is a manual hoist system to raise climbing ropes, cargo nets, or other climbing components to the wall or ceiling to prevent unauthorized use or to get the equipment out of the way of other activities. The hoist system is supplied with a metal lock box to avoid unauthorized use.

SIGN-1, Safety Wall Signage:

The Safety Wall Signage is a 12" x 18" vinyl sign intended to deter unauthorized use and / or misuse of any climbing equipment. Jammar recommends installing the signage adjacent to either the RN-1 or MLBH-1 hoist systems.



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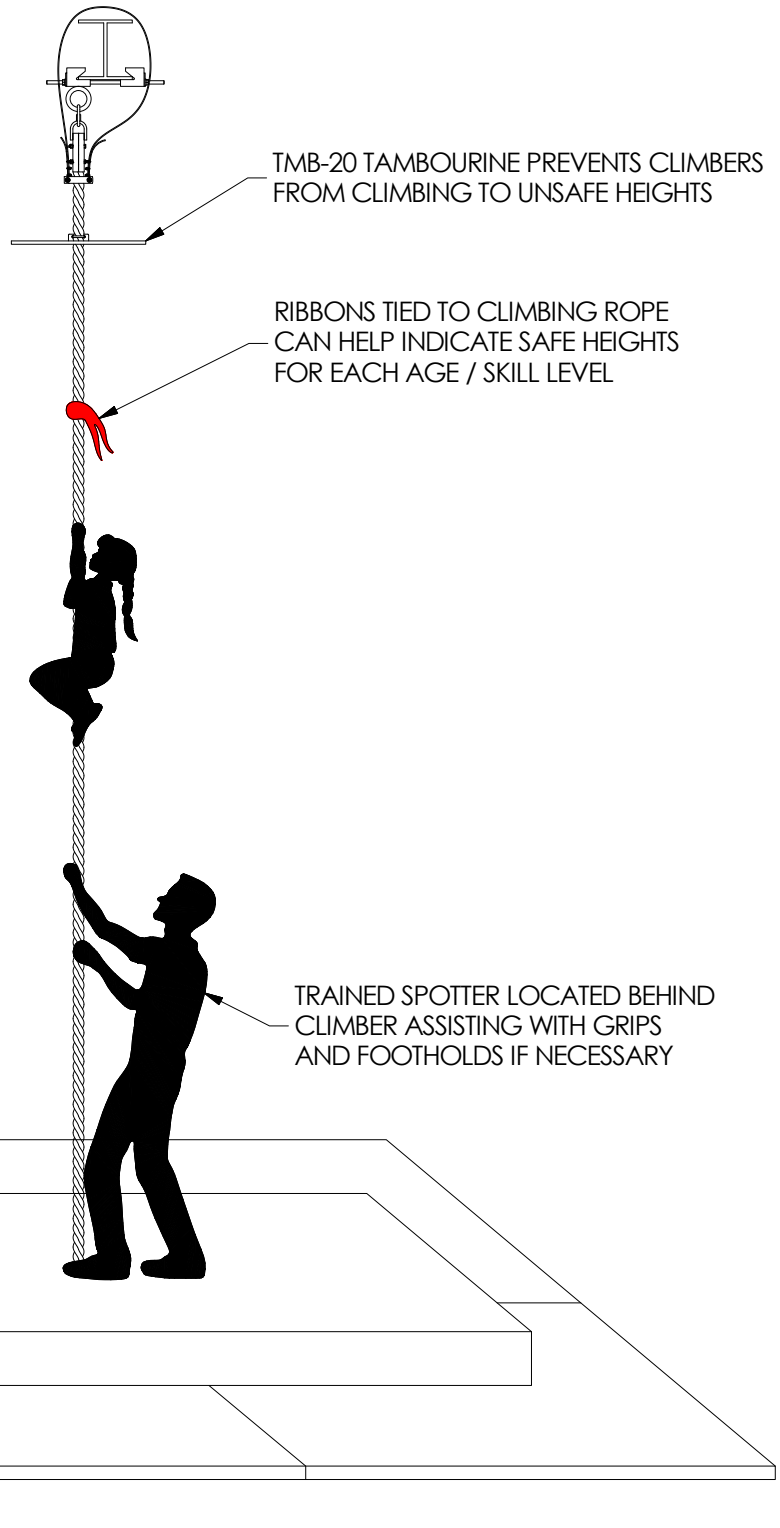
SPOTTING TECHNIQUES:

All ages and skill levels can enjoy experiencing the dynamics of rope climbing. There are important considerations before and during the use of climbing ropes that only the supervisor and / or experienced physical educator can determine. To maintain an injury free environment, selection of rope activities regarding age / skill level is important. Any student can experience rope climbing without ascending to the very top and height levels should be reasonable set. Always only allow one climber at a time.

Forethought and correct spotting helps reduce the chance of serious injury and must always be maintained regardless of age / skill levels. Never use without a spotter at the rope. Correct spotting includes assisting in holding the rope firm if needed and ensuring safe and secure footholds. Assist climber around rest knots.

Mats are essential under and around the climbing rope area and a soft landing mat should be directly under the climbing area. These mats are popular mats and can generally be used for many other activities and are often already being used within the school system. Other important notes to keep in mind when using climbing ropes:

- **The climber must descend to the floor before dismounting. Do not jump off or drop off the rope.**
- **Do not allow students to approach ceiling hardware or climb to unsafe heights.**
- **Do not swing on climbing rope.**



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INSTALLATION INSTRUCTIONS: INDOOR CLIMBING ROPES

OPERATION, CARE, MAINTENANCE, & INSPECTION:

Any and all climbing activities require the use of mats, spotting, and supervision. Mats are probably the single most important ingredient to any activity using equipment to prevent serious injury when accidents may occur. An 8" or 12" soft landing mat must be used under and around each climber and other matting around the climbing rope. Having several thick landing mats placed around the rope will make instruction much easier and more innovative. These mats are versatile and can be used in many capacities. Please note that an 8" thick landing mat is NOT the same as (4) 2" mats stacked on top of each other. Please ensure all climbers are safe when using any climbing equipment.

Jammar offers additional documentation which provides guidance for proper climbing rope use for beginner, intermediate, and advanced climbers. Jammar also offers guidance to the instructors for proper safety awareness, spotting techniques, and fun climbing activities. If not already provided, visit www.jammarmfg.com to access all the documents applicable to your Jammar equipment.

Climbing ropes are extremely durable and will give years of rugged use. It is important, however, not to drag ropes on floors or around corners, etc. which may snag individual rope fibers. Ropes are handmade and each individually inspected. If you notice any small individual fibers or if a strand pull does occur simply open rope jacket and work stand back into middle of rope. Small fibers can simply be trimmed with scissors. How long your ropes will last before replacement depends on your program use. For instance, some programs use 1 rope, 2 ropes, 3 or more ropes. Traffic on the 1 rope may be more and a need for earlier replacement more probable. Also, upper grade levels and team use will also facilitate wear, particularly on the bottom half of the ropes. Rope knots placed on the rope for climbing assistance will facilitate wear, especially because the knots are focal points when climbing. Manila ropes can be susceptible to mildew and "dry rot" in humid environments. Climbing ropes are extremely durable and will give years of rugged use. Ropes are relatively speaking inexpensive and at signs of wear downgrade and/or replace.

It is the responsibility of the owner to periodically inspect any climbing equipment. Ensure that all components are fully intact and rigidly attached to the building structure. Inspect the rope for any fraying or disassembling. Similar to you ceiling suspended basketball, baseball, curtain equipment, annual inspection should be completed on any permanently mounted equipment. Annual inspections should be completed just prior to any heavy use schedule of events. If any component is suspect or any component is damaged, DO NOT USE the equipment until it is repair or replaced. If equipped, retract the equipment or the ceiling or cone off and tag the area to ensure no one utilizes the equipment.

For further information regarding any Jammar equipment and / or appropriate safety matting, please contact your dealer or contact Jammar at 860-848-1113 (phone) or 860-848-9302 (fax).

KEEP THESE INSTRUCTIONS AND REVIEW PERIODICALLY.



INSTALLATION INSTRUCTIONS: INDOOR CLIMBING ROPES

RECORD OF INSTALLATION

Upon completion of installation, the Dealer and/or Installer must turn all documentation and applicable information over to the general contractor / customer / end user. The Dealer and/or installer must train the general contractor / customer / end user proper use of the equipment and advise of any maintenance and inspection that must occur. Please fill out the form below before turning over any equipment.

PROJECT NAME:	_____
PROJECT NUMBER:	_____
PROJECT LOCATION:	_____

DEALER NAME:	_____
DEALER CONTACT:	_____

INSTALLER NAME:	_____
INSTALLER CONTACT:	_____

SCOPE OF WORK:	_____
<i>PROVIDE BRIEF DESCRIPTION OF ALL JAMMAR EQUIPMENT INSTALLED</i>	_____

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