

## **SUBSTITUTION OF SECUREMENT ITEMS**

*Corresponding AAR Open Top Loading Rule 25*

Approved load securement items specified within these rules must be used. Substitutions may only be made in accordance with the following provisions, unless otherwise specified in the figure.

In addition to the requirements of this rule, the specific rules pertaining to the application of specific securement items must be referenced and complied with.

Steel may be substituted for wooden stakes in accordance with Rule 13.4.

High tension bands and high-tension wires may be substituted for each other if of equal or greater breaking strength. (Refer to Rule 24.8 for additional substitution of wire for steel bands in Fig. 61 (Rev. 03/00) of Section 5.)

High tension bands may be substituted by an equal number of high-tension bands of lesser dimensions if of equal or greater breaking strength.

Except as indicated in Table 19.3, 1 1/4-in. high tension bands may be substituted by an equal number of Type 1A, Grade 6, non-metallic strapping for all figured loads.

Except as indicated in Table 19.3, 2-in. high-tension bands may be substituted by an equal number of Type 1A, Grade 7, non-metallic strapping for all figured loads.

Approved, high-strength, regular-duty strapping may be substituted for high tension banding in accordance with Rule 17.3.2.

Approved Rotterdam strapping, also referred to as Unit Strap Lifting Method (USLM) strapping, maybe substituted for equal-sized high-tension banding. (See Rule 43.1 for more details.)

High tension bands used to secure a load to a car may be substituted by chains and/or cables if of equal or greater breaking strength. When used, chains and/or cables must be properly tensioned.

Nonmetallic strapping may be used for packaging or load securement only when permitted under a specific figure, or as specified in General Rule 19, unless otherwise restricted in the figure.

High tension wires may be substituted by an equal number of high-tension wires of lesser diameter if of equal or greater breaking strength.

Common annealed wire may be substituted by wires of other gauge if the total breaking strength is equal or greater.

Common annealed wire may be substituted by wire rope or cable of equal or greater strength.

Rods, bolts, or flat bars with threaded ends must not be substituted by high tension bands, high tension wires, or common annealed wires.

Where a rule or figure specifies a special grade bolt or fastener to be applied, no substitutions are permitted.

Missing or broken chains may be replaced with wire rope or cable of equal or greater breaking strength.

Mechanical brakeman may be substituted with load cushioners.

Wire rope/cable of equal or greater strength may be substituted for steel rod in Section 3 figures.

In forest product figures in Section 5, solid fiberboard lath can be used as stickers where figure calls for stickers as an optional item.