

# GUIDE FOR CERTIFICATION OF

## LIFTING APPLIANCES

JANUARY 2018

### NOTICE NO. 3 – October 2018

The following Changes were approved by the ABS Rules Committee on 25 September 2018 and become **EFFECTIVE AS OF 1 OCTOBER 2018**.

(See <http://www.eagle.org> for the consolidated version of the Guide for Certification of Lifting Appliances 2016, with all Notices and Corrigenda incorporated.)

Notes - The date in the parentheses means the date that the Rule becomes effective for new construction based on the contract date for construction. (See 1-3/7.1.)

## CHAPTER 5 GUIDE FOR CERTIFICATION OF SHIPBOARD ELEVATORS

### SECTION 4 CONSTRUCTION

#### 21 Hoisting Ropes

(Revise Paragraph 5-4/21.5, as follows:)

##### 21.5 Diameter of Ropes (1 October 2018)

Minimum diameter for hoisting ropes is to be 8 mm (0.315 in.). Outer wires of ropes are to be not less than 0.48 mm (0.019 in.) in diameter.

(Revise Paragraph 5-4/21.7, as follows:)

##### 21.7 Factor of Safety (1 October 2018)

The minimum factor of safety for hoisting ropes is to be in accordance with the following table, except that the factor of safety of steel wire hoisting ropes with diameters equal to or greater than 8 mm (0.315 in.) but less than 9.5 mm (0.375 in.) is to be not less than 12:

<i>Rope Speed</i>		<i>Minimum Factor of Safety</i>
<i>m per minute</i>	<i>ft per minute</i>	
15.2	50	7.60
22.2	75	7.75
30.0	100	7.97
37.2	125	8.10
45.0	150	8.25
52.2	175	8.40
60.0	200	8.60

The factor of safety is to be calculated by the following formula:

$$f = \frac{S \times N}{W}$$

where

- $N$  = number of wire rope parts (runs) supporting the total load
- $S$  = manufacturer's rated breaking force of one wire rope, in kN (lbf)
- $W$  = maximum static load, in kN (lbf), imposed on all suspension members with the car and its rated load at any position in the hoistway