ISO 12217-1:2002-04 (E)

Small craft - Stability and buoyancy assessment and categorization - Part 1: Non-sailing boats of hull length greater than or equal to 6 m

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Terms and definitions 2
3.1 Primary 2
3.2 Downflooding 3
3.3 Dimensions, areas and angles 4
3.4 Condition, mass and volume 5
3.5 Other terms and definitions 6

4 Symbols 8

5 Procedure 8
5.1 Maximum total load 8
5.2 Sailing or non-sailing 8
5.3 Tests and calculations to be applied 8

6 Tests, calculations and requirements 10
6.1 Downflooding 10
6.2 Offset-load test 14
6.3 Resistance to waves and wind (design categories A and B only) 15
6.4 Heel due to wind action (design categories C and D only) 16
6.5 Flotation requirements 17

7 Application 17
7.1 Deciding the design category 17
7.2 Meaning of the design categories (see Table 5) 17

Annex A (normative) Full method for required downflooding height 18

Annex B (normative) Method for offset-load test 20

Annex C (normative) Methods for calculating downflooding angle 24

Annex D (normative) Determining the curve of righting moments 26

Annex E (normative) Method for level flotation test 28

Annex F (normative) Flotation material and elements 32

Annex G (normative) Information for owner's manual 34

Annex H (informative) Summary of requirements 35

Annex I (informative) Worksheets 36

Bibliography 47