

GUIDE FOR

PASSENGER COMFORT ON SHIPS SEPTEMBER 2014

Guide to Color Coding Used in Online Version of the Guide

The following summarizes the colors corresponding to Rule Changes, Corrigenda items and editorial changes in the Guide files which are available for download.

Rule Changes:

Changes effective 1 September 2014

Corrigenda:

Editorials:

Editorial Changes

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GUIDE FOR

COMFORT ON YACHTS

SEPTEMBER 2014

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Foreword

This ABS *Guide for Comfort on Yachts* presents guidance for measuring the comfort of Owners and their guests while occupying cabins, dining spaces, lounges, cocktail bars and other Owner and guest spaces onboard.

The assessment criteria and measurement methodology outlined in this Guide can lead to obtaining an ABS Comfort notation for yachts. The criteria allow a measure of the comfort of a yacht related to the ambient environmental aspects of whole-body vibration and noise onboard. The Owner/guest comfort criteria are applicable to new and existing yachts for which an optional Comfort – Yacht (**COMF(Y)**) or a Comfort Plus – Yacht (**COMF+(Y)**) notation has been requested.

This Guide, originally published in December 2008, has undergone significant revision. Key revision areas include changes to the Whole-body Vibration (WBV) measurement and evaluation methodology and criteria as well as changes to the Noise criteria. These revisions are due to several factors, including:

1. Input from industry (i.e., Owners, designers, and construction yards)
2. Revisions to standards referenced in this Guide
3. Revised statutory regulations
4. Changes in current design practices and principles

This Guide becomes effective on the first day of the month of publication.

Users are advised to check periodically on the ABS website www.eagle.org to verify that this version of this Guide is the most current.

We welcome your feedback. Comments or suggestions can be sent electronically by email to rsd@eagle.org.

GUIDE FOR COMFORT ON YACHTS

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SECTION 1 General

1 Introduction

ABS recognizes the positive impact that appropriate comfort requirements and design practices can have on the Owner and their guests' comfort, safety, and overall well-being. The Owner/guest comfort criteria contained in this Guide have been developed to provide a means to measure and assess the level of comfort of Owners and their guests on yachts.

3 Application

The Owner/guest comfort criteria are applicable to new and existing yachts for which an optional Comfort – Yacht (**COMF(Y)**) or a Comfort Plus – Yacht (**COMF+(Y)**) notation has been requested. The Owner/guest comfort criteria are a measure of the acceptability of a yacht related to the ambient environmental aspects of whole-body vibration and noise.

A separate document, the *ABS Guide for Passenger Comfort on Ships*, can be referenced for criteria on two (2) additional ambient environmental aspects of comfort; indoor climate and lighting. Compliance with those criteria for indoor climate and lighting are not a requirement for the Comfort – Yacht (**COMF(Y)**) or the Comfort Plus – Yacht (**COMF+(Y)**) notation.

5 Scope

The optional Comfort notations focus on two (2) Owner/guest comfort related aspects of yacht design, whole-body vibration and noise. The comfort criteria are based on currently available research data and standards. The test conditions, measurement locations, test methods and instruments were selected to provide a practical methodology that can be applied internationally with reliability and suitable validity.

7 Terminology

Accommodation Areas: Yacht areas where the primary purpose is to rest and recreate. Owner/guest accommodation spaces include cabins, staterooms, dining areas, entertainment areas, recreation rooms, and other Owner/guest spaces. For the purposes of this Guide, accommodation areas are primarily restricted to the spaces Owners and their guests would normally use onboard yachts.

Ambient Environment: Ambient environment refers to the environmental conditions that Owners and their guests are exposed to during periods of transit, leisure, or rest. Specifically, this Guide provides criteria and limits for whole-body vibration and noise.

Comfort: The acceptability of the conditions of a yacht as determined by its vibration and noise qualities according to prevailing research and standards for human comfort.

Testing Specialists: Specialized test personnel who must meet the requirements of Appendix 2, "Procedural Requirements for **ABS Recognized Ambient Environmental Testing Specialists**" of the *ABS Guide for Passenger Comfort on Ships*.

Occupied Owner/Guest Spaces: For the purposes of this Guide, any space used for rest, entertainment, and dining where the Owner or their guests may be present for twenty (20) minutes or longer at one time.

Owner/Guest: Every person onboard other than the Master and the members of the crew or other persons employed or engaged in any capacity on board a yacht for the business of that yacht.

Shall: Expresses a provision that is mandatory.

Test Plan: Document containing the requisite information regarding yacht design and layout, test personnel, test conditions, measurement locations, data acquisition, instruments, data analysis and test schedule necessary for verifying the measurements for the ambient environmental aspects of comfort.

Test Report: Document containing the actual testing result from the Ambient Environmental tests including details of the testing conditions, measurement locations, measurement equipment, and the results of the data collected and analyzed.

9 Notation

At the yacht Owner or shipyard's request, a yacht complying with the minimum criteria for Owner/guest comfort **may** be assigned a notation of **COMF(Y)**. A yacht complying with the **motion sickness** criteria with respect to whole-body vibration, **may** be assigned the notation **COMF+(Y)**. A summary of the differences between these notations is given below.

Notation	Whole-body Vibration	Noise
COMF(Y)	Must meet comfort-based vibration level criteria	Must meet criteria for noise
COMF+(Y)	Must meet comfort-based vibration level criteria as well as motion sickness criteria	No difference between COMF(Y) and COMF+(Y)

11 Process for Obtaining a Notation

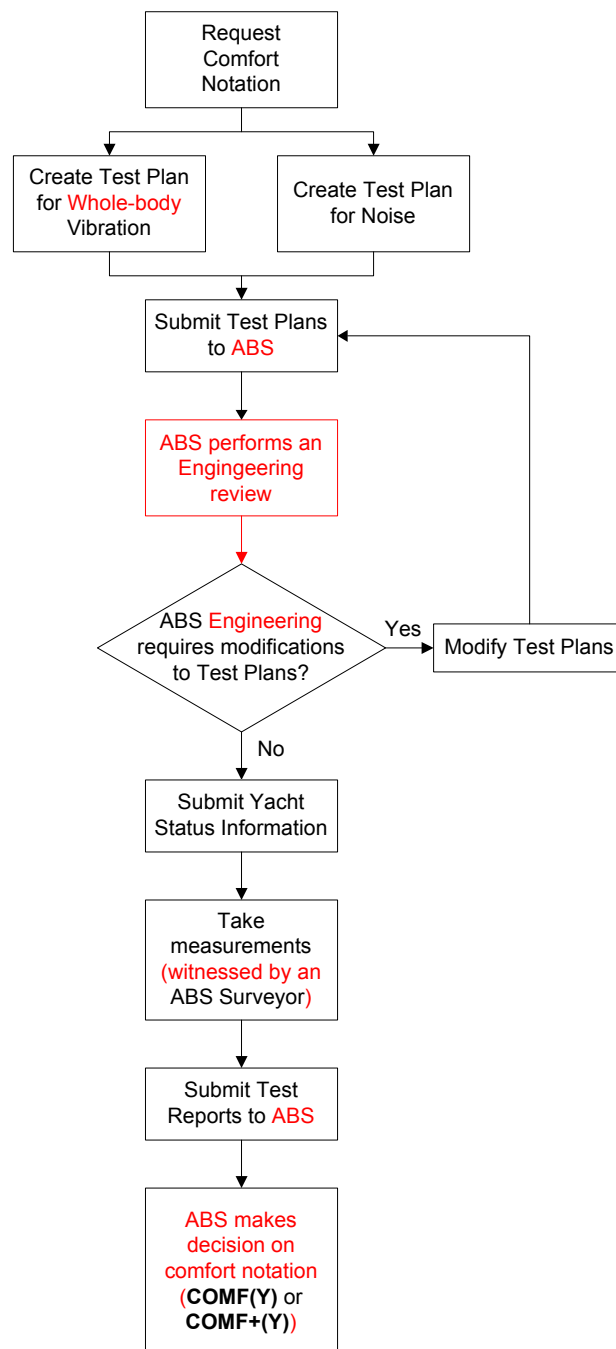
Prior to scheduling ambient environmental testing activities, the yacht Owner or shipyard shall certify the operational status of the yacht as being fully operational and/or inclusive of all equipment and furnishings. If the yacht is not fully operational, then a complete listing of **deficient** areas, components, equipment, etc., shall be submitted to ABS **Engineering for review**. ABS **shall then** make a determination and notify the yacht Owner or shipyard as to whether ambient environmental testing can commence. **The intent is to align sea trial activities with the ambient environmental testing so that all testing is completed during this time.**

The process for obtaining a **COMF(Y)** or **COMF+(Y)** notation is presented in Section 1, Figure 1. The following paragraph briefly describes the notation process.

Ambient environmental **Test Plans** for whole-body vibration and noise shall be prepared and submitted to ABS Engineering for review and approval. Information submitted to ABS Engineering shall serve as a primary vehicle for verifying the measurement locations and measurement process, as well as specifying the **Testing Specialist** who will perform the ambient environmental testing. Testing, inspections and data collection shall be performed by **Testing Specialist** and witnessed by an ABS Surveyor. **Test Reports** for ambient environmental testing shall be prepared by the **Testing Specialist** and submitted to the ABS Surveyor for review for determination of notation confirmation. Specific **Test Plan** and **Test Reporting** details for whole-body vibration and noise are outlined in the following locations:

Environmental Aspect	Test Plan Details	Test Report Details
Whole-body Vibration	Subsection 2/11	Subsection 2/15
Noise	Subsection 3/11	Subsection 3/15

FIGURE 1
Comfort Notation Process for Initial Requirements



13 Surveys after Construction

It is intended that all surveys after construction are to be aligned with Classification Surveys. Harmonization of surveys is to be carried out at the first available opportunity. See Section 7-9-17 of the *ABS Rules for Survey After Construction (Part 7)* for the survey requirements.