INTERNATIONAL STANDARD GUIDE



Determining Frame Allowance

FRM-396 Addopted-1997 Standards-1998 Revised-1999 Revised-2000

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1.0 Scope

- 1.1 The purpose of this document is to outline the importance of having a frame allowance.
- 1.2 To be a guide for determining the amount of that allowance.
- 1.3 To create an awareness of the various factors that should be considered when figuring frames allowances.

2.0 Terminology

- 2.1 Reference–FACTS Terminology, latest revision.
- 2.2 Terminology Format–The following words are defined to clarify the importance of sections or formats, and to identify those that are mandatory.
- 2.2.1 "Shall"—is used to indicate that a provision is mandatory.
- 2.2.2 "Should"-is used to indicate that a provision is not mandatory, but recommended as good practice.
- 2.2.3 "May"—is used to indicate that a provision is optional.
- 2.3 Allowance—The difference between the size of the objects being framed and the inside dimension of the frame.
- 2.4 Rabbet Width–The measurement from the innermost lip of the frame opening to the inside of the moulding. (see diagram)
- 2.5 Rounding—The process of replacing a number by another number of approximately the same value to avoid small fractions or less than full millimeters. e.g.,

Rounding inches 3/16'' up = 1/4'', down = 1/8'' rounding to the closest 1/8 inch.

Rounding millimeters 203mm up = 205mm 202mm down = 200mm rounding to the closest 5mm.

2.6 Spacers—In a frame, strips of foam board, matboard, wood, plastic, etc., usually placed in the rabbet under the lip, used to create a space between glazing and artwork package.

3.0 Summary of Practice

- 3.1 It is common practice to cut a frame slightly larger than the item being framed. This difference is known as the "allowance."
- 3.2 The allowance should accommodate inaccuracies in measuring, rounding, cutting and squareness of all the materials used in a framing job.
- 3.3 The allowance should accommodate the free expansion and contraction of all the materials in the frame as well as the frame itself.

4.0 General Considerations

- 4.1 Discrepancies in accuracy and calibration of measuring and cutting devices will affect the allowance.
- 4.2 Variations in measuring and rounding of both frame and artwork/glazing package will affect allowance.

- 4.3 Variations within the moulding used, width, rabbet, or lip dimension will affect allowance.
- 4.4 Bowing of a moulding along its length will affect allowance.
- 4.5 Items out of square need additional allowance and/or a wider lip to accommodate their shape.
- 4.6 Stretched canvases may be out of square, bow along the sides, have bulk at the corners and unpainted edges; a wider lip and additional allowance may be needed.
- 4.7 A wider lip and/or added allowance should be included on stretched canvases to accommodate re-tensioning (keying out) at a later date.
- 4.8 The moulding rabbet should have sufficient width to cover both artwork and allowance. When hung the artwork will rest on the bottom of the frame. The rabbet must cover the artwork/glazing package so that bowing of the moulding due to warping, hanging or handling will not expose the edge of the artwork/glazing. Frame reinforcement may be required to eliminate these problems.

5.0 Expansion and Contraction of Materials

- 5.1 The art and all materials used in a frame job expand and contract at differing rates with temperature and humidity. An appropriate allowance should accommodate the greatest rate for all materials used.
- 5.2 Allowing for the differences in expansion will reduce the problems and damage to the artwork that can be incurred from bowed or broken glazing, restriction of expansion and broken frame joints.
- 5.3 In larger frames, more of the allowance is used by the expansion/contraction of materials leaving less to accommodate size or squareness inaccuracies.

6.0 Material Expansion Rates

- 6.1 Material expansion rates are different for Glass, Acrylic, Aluminum, Paper and Wood.
- 6.2 The rate of expansion or contraction is in direct relationship to temperature and/or humidity changes.
- 6.3 Oak and teak expand/contract at a much greater rate with changes in humidity than do mahogany or padauk.
- 6.4 Paper in single sheets, matboard of different plys, backboards, filler boards, foam boards, laminated materials, etc. all expand/contract at differing rates with changes in temperature and/or humidity.
- 6.5 For some examples of these changes refer to the graph below.

7.0 Spacer Allowance Considerations

- 7.1 Spacers that bond to the edge of the glazing will shift the amount of the allowance.
- 7.2 Spacers that grip over the edge of the glazing will increase the over-all size by approximately 1/16 inch leaving less allowance to accommodate size or squareness inaccuracies.
- 7.3 Spacers that attach to the inside of the rabbet should be wide enough to support the glazing when it shifts the amount of the allowance or if the frame is bowed.
- 7.4 The moulding lip should be wide enough to cover the spacer when the glazing/spacer shifts the amount of the allowance.
- 7.5 Slightly increasing glass size will reduce shifting while maintaining an appropriate allowance for the artwork/ package.

8.0 Responsibility for Quality Assurance

8.1 Quality is the result of accuracy. Squareness, measurement, rounding, determining allowance, and the precise communication of that information.

9.0 Kev Words

9.1 Allowance, Contraction, Expansion, Measuring, Rounding, Spacer, Squareness