



National Aeronautics and  
Space Administration

**MEASUREMENT  
SYSTEM  
IDENTIFICATION**

MSFC-STD-373  
REVISION A

EFFECTIVE DATE: August 4, 2005

---

**George C. Marshall Space Flight Center**  
Marshall Space Flight Center, Alabama 35812

EI42

**MULTIPROGRAM/PROJECT COMMON-USE  
DOCUMENT**

**LETTERING OF ELECTRICAL  
EQUIPMENT**

**(Approved for Public Release; Distribution is Unlimited)**

**CHECK THE MASTER LIST—  
VERIFY THAT THIS IS THE CORRECT VERSION BEFORE USE**

<b>Multiprogram/Project Common-Use Document EI42</b>		
<b>Title: LETTERING OF ELECTRICAL EQUIPMENT</b>	<b>Document No.: MSFC-STD-373</b>	<b>Revision: A</b>
	<b>Effective Date: 8/04/2005</b>	<b>Page 2 of 6</b>

### DOCUMENT HISTORY LOG

Status (Baseline/ Revision/ Canceled)	Document Revision	Effective Date	Description
BASELINE	A	8/04/2005	

CHECK THE MASTER LIST - VERIFY THAT THIS IS THE CORRECT VERSION BEFORE USE

Multiprogram/Project Common-Use Document EI42		
Title: LETTERING OF ELECTRICAL EQUIPMENT	Document No.: MSFC-STD-373	Revision: A
	Effective Date: 8/04/2005	Page 3 of 6

## CONTENTS

<u>PARAGRAPH</u>	<u>PAGE</u>
<u>DOCUMENT HISTORY LOG</u> .....	2
1. <u>SCOPE</u> .....	4
2. <u>APPLICABLE DOCUMENTS</u> .....	4
3. <u>DEFINITIONS</u> .....	4
4. <u>GENERAL REQUIREMENTS</u> .....	4
5. <u>DETAILED REQUIREMENTS</u> .....	4
6. <u>NOTES</u> .....	5
 <u>FIGURE</u>	
1. Letter Style and Sizes .....	6

Multiprogram/Project Common-Use Document EI42		
Title: LETTERING OF ELECTRICAL EQUIPMENT	Document No.: MSFC-STD-373	Revision: A
	Effective Date: 8/04/2005	Page 4 of 6

## 1. SCOPE

1.1 This standard establishes the criteria for lettering of electrical equipment.

## 2. APPLICABLE DOCUMENTS

2.1 Not applicable.

## 3. DEFINITIONS

3.1 For the purpose of this standard, the following definitions of terms shall apply:

- a. Straight line characters. – Characters containing no loops (examples: E, H, I, M, N, X, Z.)
- b. Character lines. – The individual marks forming the character.
- c. Character line width. – The width of individual marks forming the character.

## 4. GENERAL REQUIREMENTS

4.1 Workmanship. – When lettering as specified herein is applied, the finished product shall display a professional appearance and shall be free from ragged edges, unbalanced characters, or closed characters.

## 5. DETAILED REQUIREMENTS

5.1 Character style. – All characters shall be Gothic in style and in accordance with figure 1. Roman numerals and lower case letters shall be limited to special applications.

5.2 Character spacing. – For a single word or similar group of characters, the spacing between straight line characters shall range between 1/12 minimum and 1/4 maximum of the character height. All other characters shall be visually balanced.

5.3 Character line width. – The character line width shall be between 1/6 to 1/8 of the character height, except for 0.500-inch characters, which shall range between 1/10 to 1/12 of the character height.

5.4 Tolerance. – The tolerances for two place decimal dimensions shall be plus or minus 0.03 inch and for three place decimal dimensions shall be plus or minus 0.010 inch.

CHECK THE MASTER LIST - VERIFY THAT THIS IS THE CORRECT VERSION BEFORE USE

<b>Multiprogram/Project Common-Use Document EI42</b>		
<b>Title: LETTERING OF ELECTRICAL EQUIPMENT</b>	<b>Document No.: MSFC-STD-373</b>	<b>Revision: A</b>
	<b>Effective Date: 8/04/2005</b>	<b>Page 5 of 6</b>

5.5 Word spacing. – The spacing between words shall range between 5/8 to 3/4 of the letter height, depending on the characters being separated.

5.6 Colors. – Unless otherwise specified, the lettering shall be black.

5.7 Dimensions. – For the purpose of this standard, the dimensions shall be in decimals. Dimensions apply from outside to outside of character, not to centerline.

## 6. NOTES

When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility for any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any matter licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

Multiprogram/Project Common-Use Document EI42		
Title: LETTERING OF ELECTRICAL EQUIPMENT	Document No.: MSFC-STD-373	Revision: A
	Effective Date: 8/04/2005	Page 6 of 6

ABCDEFGHIJKLMNOPQRSTUVWXYZ      abcdefghijklmnopqrstuvwxyz  
 1234567890  
 This is a sample of 0.109 lettering.

ABCDEFGHIJKLMNOPQRSTUVWXYZ      abcdefghijklmnopqrstuvwxyz  
 1234567890  
 This is a sample of 0.125 lettering.

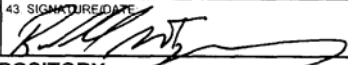

ABCDEFGHIJKLMNOPQRSTUVWXYZ      abcdefghijklmnopqrstuv  
 1234567890  
 This is a sample of 0.156 lettering.

ABCDEFGHIJKLMNOPQRS      abcdefghijklmnopqrs  
 1234567890  
 This is a sample of 0.188 lettering.

ABCDEFGHIJKLMN      abcdefghijklmn  
 1234567890  
 This is a sample of 0.250 lettering.

ABCDEFG      abcdefg  
 12345678  
 This is a sample of 0.500 lettering.

Figure 1. Letter style and sizes.

MSFC DOCUMENTATION REPOSITORY - DOCUMENT INPUT RECORD					
I. GENERAL INFORMATION					
1. APPROVED PROJECT: N/A	2. DOCUMENT/DRAWING NO. MSFC-STD-373	3. CONTROL NUMBER	4. RELEASE DATE 9/1/05	5. SUBMITTAL DATE 8/15/2005	
6. DOCUMENT/DRAWING TITLE LETTERING OF ELECTRICAL EQUIPMENT			7. REPORT TYPE: STANDARD		
8. CONTRACT NUMBER/PERFORMING ACTIVITY: N/A	9. DRD NUMBER		10. DPD/DRL/DRD NUMBER		
11. DISPOSITION AUTHORITY (Check One): <input checked="" type="checkbox"/> Official Record - NRRS 8/5/A/1(c) <input type="checkbox"/> Reference Copy - NRRS 8/5/A/3 (destroy when no longer needed)	12. SUBMITTAL AUTHORITY: RANDY MONTGOMERY/EI42		13. RELEASING AUTHORITY: RANDY MONTGOMERY/EI42		
14. SPECIAL INSTRUCTIONS N/A					
15. CONTRACTOR/SUBMITTING ORGANIZATION, ADDRESS AND PHONE NUMBER:			16. ORIGINATING NASA CENTER: MSFC		
			17. OFFICE OF PRIMARY RESPONSIBILITY: EI42		
18. PROGRAMMATIC CODE (5 DIGITS): <del>N/A</del> 29710			19. NUMBER OF PAGES: 6		
II. ENGINEERING DRAWINGS					
20. REVISION:	21. ENGINEERING ORDER	22. PARTS LIST:	23. CCBD:		
III. REPORTS, SPECIFICATIONS, ETC.					
24. REVISION A	25. CHANGE:	26. VOLUME:	27. BOOK:	28. PART:	29. SECTION:
30. ISSUE:	31. ANNEX:	32. SCN:	33. DCN:	34. AMENDMENT:	
35. APPENDIX:	36. ADDENDUM:	37. CCBD:	38. CODE ID:	39. IRN:	
IV. EXPORT AND DISTRIBUTION RESTRICTIONS					
<input type="checkbox"/> Privacy Act (see MWI 1382.1)		<input type="checkbox"/> EAR (see MPG 2220.1)			
<input type="checkbox"/> Proprietary (see MPD 2210.1)		<input type="checkbox"/> Other ACI (see NPG 1620.1 and MPG 1600.1) _____			
<input type="checkbox"/> Patent (see MPG 2220.1)		<input checked="" type="checkbox"/> No statutory or institutional restrictions applicable - material may be electronically distributed to user in the NASA domain			
<input type="checkbox"/> ITAR (see MPG 2220.1)					
V. ORIGINATING ORGANIZATION APPROVAL					
40. ORG CODE: EI42	41. PHONE NUMBER: 544-3713	42. NAME: RANDALL MONTGOMERY	43. SIGNATURE/DATE: 		
VI. TO BE COMPLETED BY MSFC DOCUMENTATION REPOSITORY					
44. RECEIVED BY: 		45. DATE RECEIVED: 9/1/05	46. WORK ORDER: 03-00995-5		