

Carrier Transport Refrigeration & A/C Engineering Requirement	No: 57-00632 Rev A	
	Date: 11/28/01	Page 1 of 1
Title: Aluminum Sheet Metal (5052-H32 modified)	Authorization No. 69N101GP01	Rev. Description: Initial Release

Purpose: The purpose of this Engineering Requirement is to define exceptions to the contents of nationally recognized Aluminum Material Specification 5052-H32. These exceptions are necessary in order to meet special CTRAC theoretical minimum weight & material thickness specifications. In addition, special flatness and oil canning limits are defined herein.

Application: The number "57-00632" shall be specified in the material block on engineering drawings and as the material number for BOM item masters, in lieu of 5052-H32.

Scope: Raw material specification for Transport Refrigeration & A/C products.

Specifications:

1.0 Tolerances on material thickness: (Bold Italics = preferred material sizes)

Nominal Material Thickness	Tolerance on Nom. Material Thickness	Max. / Min. Material Thickness	See Note(s)
.063	+ / -.0035	.0665 / .0595	1 & 3
.080	+.0045 / -.0030	.0845 / .0770	2 & 3
.090	+.0045 / -.0035	.0945 / .0865	1 & 3
.100	+ / -.0060	.1060 / .0940	2 & 3
.125	+.006 / -.0055	.1310 / .1195	1 & 3
.160	+/- .0090	.1690 / .1510	2 & 3
.187	+.009 / -.011	.1960 / .1760	1 & 3
.250	+.0140 / -.0240	.2640 / .2260	1 & 3

2.0 Flatness Tolerance:

Material Thickness Range	CTRAC Flatness Tol. (Measured over 4ft.)	See Note(s)
.020 thru .064	.156	4
.065 thru .249	.187	4
.250 thru .624	.250	4

3.0 Oil Canning Characteristics:

Material supplied to the requirements of this specification shall not exhibit any oil canning characteristics after punching or shearing. Oil canning is defined as an obvious deformation caused by residual material stresses; typically released by shearing or punching the sheet into smaller sizes. Sheet deformation shall not exceed one forth the material thickness as measured over two linear feet or one half the material thickness as measured over four linear feet. Measurements shall be taken on a flat horizontal surface with the material at room temperature. See note 4.

4.0 Notes:

1. Min. thickness derived from CTD / Edgecomb purchasing agreement, exhibit B, dtd. 12/17/99.
2. Min. thickness derived from ANSI H35.2-2000 for 39.37 thru 59.06 inch wide sheet.
3. Max. thickness derived from ANSI H35.2-2000 for 39.37 thru 59.06 inch wide sheet.
4. Flatness tolerance & oil canning limits derived from Supply Agreement CRO – Edgecomb Metals dtd. 1/01/01.

File: this file is located on the Syracuse Server L:\Drafting\Drawings	Prepared By: N. Rizzo	Approved By:	Date: 11/28/01
---	------------------------------	--------------	----------------