

# RATIONALE

AS5131 HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

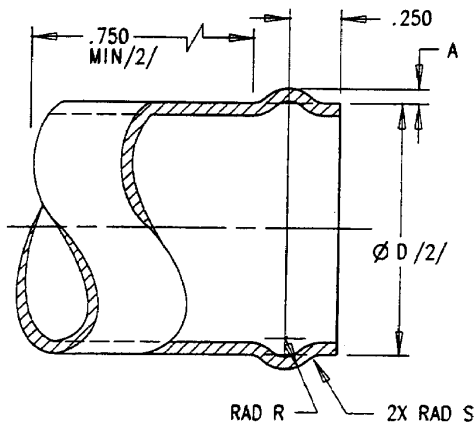


FIGURE 1 - TUBING END - STYLE A

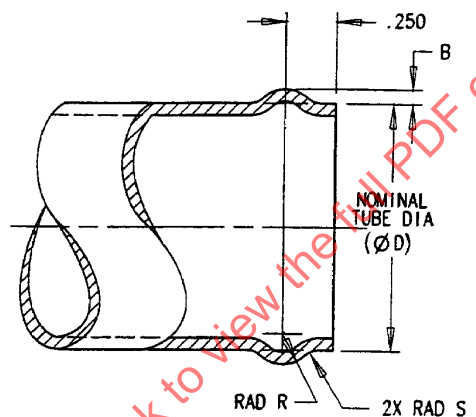


FIGURE 2 - TUBING END - STYLE B

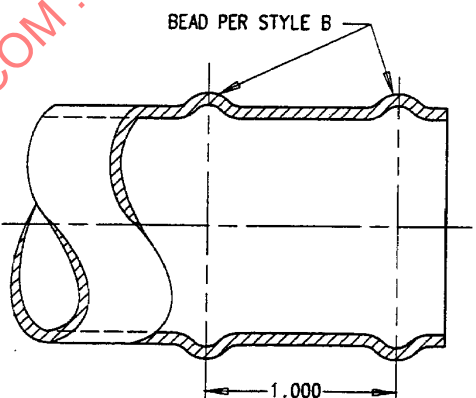
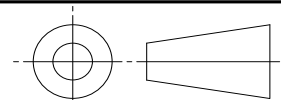


FIGURE 3 - TUBING END - STYLE C

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS5131>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3

PROCUREMENT SPECIFICATION: NONE /1/



## AEROSPACE STANDARD

TUBE END - BEADED,  
DESIGN STANDARD

AS5131  
SHEET 1 OF 3

TABLE 1 - DIMENSIONS

| BASIC NO.<br>AS5131<br>SIZE<br>CODE<br>/8/ /9/ | D /2/<br>(NOMINAL<br>TUBE<br>SIZE) | D /2/<br>TOLERANCES<br>FOR<br>STYLE A END | A<br>±.003 | B           | R           | S           |
|------------------------------------------------|------------------------------------|-------------------------------------------|------------|-------------|-------------|-------------|
| 04                                             | .250                               | +.003/- .010                              | .031       | .023 - .033 | .031 - .125 | .010 - .062 |
| 05                                             | .313                               | +.003/- .010                              | .033       | .023 - .033 | .031 - .125 | .010 - .062 |
| 06                                             | .375                               | +.003/- .010                              | .035       | .025 - .035 | .031 - .125 | .010 - .062 |
| 08                                             | .500                               | +.003/- .010                              | .038       | .028 - .038 | .031 - .125 | .010 - .062 |
| 10                                             | .625                               | +.003/- .010                              | .038       | .028 - .038 | .031 - .125 | .010 - .062 |
| 12                                             | .750                               | +.004/- .010                              | .038       | .030 - .040 | .031 - .125 | .010 - .062 |
| 16                                             | 1.000                              | +.005/- .010                              | .062       | .047 - .059 | .062 - .156 | .015 - .093 |
| 20                                             | 1.250                              | +.005/- .010                              | .062       | .047 - .059 | .062 - .156 | .015 - .093 |
| 24                                             | 1.500                              | +.005/- .010                              | .072       | .056 - .068 | .062 - .156 | .015 - .093 |
| 28                                             | 1.750                              | +.005/- .010                              | .072       | .056 - .068 | .062 - .156 | .015 - .093 |
| 32                                             | 2.000                              | +.005/- .010                              | .082       | .065 - .081 | .062 - .156 | .015 - .093 |
| 36                                             | 2.250                              | +.006/- .010                              | .082       | .065 - .081 | .062 - .156 | .015 - .093 |
| 40                                             | 2.500                              | +.006/- .010                              | .082       | .065 - .081 | .062 - .156 | .015 - .093 |
| 44                                             | 2.750                              | +.006/- .010                              | .082       | .065 - .081 | .062 - .156 | .015 - .093 |
| 48                                             | 3.000                              | +.006/- .010                              | .082       | .065 - .081 | .062 - .156 | .015 - .093 |
| 52                                             | 3.250                              | +.006/- .010                              | .088       | .067 - .087 | .062 - .156 | .015 - .093 |
| 56                                             | 3.500                              | +.008/- .010                              | .088       | .067 - .087 | .062 - .156 | .015 - .093 |
| 60                                             | 3.750                              | +.008/- .010                              | .088       | .067 - .087 | .062 - .156 | .015 - .093 |
| 64                                             | 4.000                              | +.008/- .010                              | .088       | .067 - .087 | .062 - .156 | .015 - .093 |
| 68                                             | 4.250                              | +.008/- .010                              | .088       | .067 - .087 | .062 - .156 | .015 - .093 |
| 72                                             | 4.500                              | +.008/- .010                              | .088       | .067 - .087 | .062 - .156 | .015 - .093 |
| 76                                             | 4.750                              | +.008/- .010                              | .088       | .067 - .087 | .062 - .156 | .015 - .093 |
| 80                                             | 5.000                              | +.008/- .010                              | .088       | .067 - .087 | .062 - .156 | .015 - .093 |
| 84                                             | 5.250                              | +.008/- .010                              | .088       | .067 - .087 | .062 - .156 | .015 - .093 |
| 88                                             | 5.500                              | ±.010                                     | .088       | .067 - .087 | .062 - .156 | .015 - .093 |
| 92                                             | 5.750                              | ±.010                                     | .088       | .067 - .087 | .062 - .156 | .015 - .093 |
| 96                                             | 6.000                              | ±.010                                     | .088       | .067 - .087 | .062 - .156 | .015 - .093 |

## NOTES:

- /1/ TUBE ENDS PER STYLE A ARE INTENDED FOR USE WITH MIL-C-25014 AND MIL-C-85061 TYPE FLEXIBLE COUPLINGS. TUBE ENDS PER STYLE B ARE INTENDED FOR USE WITH HOSE AND HOSE CLAMP APPLICATIONS. TUBE ENDS PER STYLE C ARE INTENDED FOR USE WITH HOSE AND HOSE CLAMP APPLICATIONS WHERE EXTRA TUBE RIGIDITY IS REQUIRED.
- /2/ TUBE OD FOR STYLE A END, AFTER BEADING, SHALL BE CONTROLLED FOR SPECIFIED DISTANCE WITHIN SPECIFIED TOLERANCES.
3. INTERPRETATION OF DRAWING PER ARP4296.
4. SURFACE TEXTURE: SYMBOLS PER ANSI Y14.36; REQUIREMENTS PER ANSI/ASME B46.1. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125  $\mu$ in Ra.
5. REMOVE BURRS AND SHARP EDGES.
6. DIMENSIONING AND TOLERANCING: ASME Y14.5M-1994
7. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS  $\pm$ .030.
- /8/ TUBE DIAMETERS IN EXCESS OF 6 in SHALL BE CODED BY SUFFIXING THE NOMINAL TUBE OD IN SIXTEENTHS OF AN INCH TO THE BASIC DESIGN STANDARD NUMBER. DIMENSIONS FOR THESE SIZES SHALL BE THE SAME AS AS5131-96. EXAMPLE OF PART NUMBER: AS5131-184 = TUBE BEAD FOR 11.50 OD TUBE.

|                                                                                     |                                       |  |                        |  |
|-------------------------------------------------------------------------------------|---------------------------------------|--|------------------------|--|
|  | AEROSPACE STANDARD                    |  | AS5131<br>SHEET 2 OF 3 |  |
|                                                                                     | TUBE END - BEADED,<br>DESIGN STANDARD |  |                        |  |