

Flammability Testing & Certification

## **Step 1: General Information**

Please enter all the general information and aircraft fields below. All fields are required.

COMPANY NAME CONTACT NAME

PHONE FAX EMAIL

AIRCRAFT COMPLETION DATE PUCHASE ORDER

**Aircraft Information** 

AIRCRAFT MAKE AIRCRAFT MODEL

AIRCRAFT SERIAL NUMBER AIRCRAFT TAIL NUMBER

DOES SKANDIA HAVE YOUR PERMISSION TO FABRICATE TEST SPECIMENS AND ISSUE FAA 8130-9 FORMS ON YOUR BEHALF?

MODIFICATION?

No

Yes

IS TEST DATA IN SUPPORT OF AC 25-25B TSO

Yes No

# DOES THE SEAT CURRENTLY HAVE MODIFICATION TAG(S) INSTALLED NEXT TO THE TSO TAG?

Yes No If yes, please include a current picture of modification tag(s).

## **Step 2: Testing & Fabrication**

Please enter all the testing and fabrication fields below. All fields are required.

SINGLE PASSENGER SEATS DOUBLE PASSENGER SEATS DIVANS

LAV SEATS

JUMPSEATS/
FLIGHT ATTENDANT SEATS (FAS)

CREW SEATS



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### **Step 3: Dress Cover Replacement**

Re-upholstery of a seat can affect its certification basis. The modifier may be required to do additional testing or gain additional approvals to maintain airworthiness approval.

\*All aircraft seats require flammability testing for all components of the seat (armrest, shrouds, close-out, drawers, etc.) tested in the "as installed state" per 14 CFR 25.853(a).

#### **SEAT MANUFACTURER**

| SEAT COMPOSITE TESTS | TO BE TESTED? | IS SKANDIA FABRICATING? |
|----------------------|---------------|-------------------------|
| ARMRESTS             | Yes No        | Yes No                  |
| SEAT SHROUDS         | Yes No        | Yes No                  |
| SEAT BASE            | Yes No        | Yes No                  |

### **Step 4: Seat Part Numbers**

Please list out the seat part and serial numbers for each seat on the aircraft.

SEAT PART NUMBERS SEAT LOCATION SEAT SERIAL NUMBERS



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### **Step 4: Seat Part Numbers - continued**

Please list out the seat part and serial numbers for each seat on the aircraft.

SEAT PART NUMBERS (CONTINUED)

SEAT SERIAL NUMBERS (CONTINUED)

## **Step 5: Items Required to Complete Fire-Blocking**

Test plan process does not begin until all materials and paperwork have been received.

Copies of **INVOICES OR PACKING LISTS** providing traceability for all fabricating components used in production including: dress cover(s), foam(s), glue, thread, fastener, muslin, canvas, batting, and all other materials used in production cushion assembly.

Please take pictures of each different cushion assembly: backs, bottoms, headrests, legrests/footrests, and armrests. Include dimensions and armrest buildups on steps 8-17 of this checklist. It is very important to simulate the placement of any hook and loop attachment strips that may attach either back or bottom assemblies to the seat frame. Please make sure these are included.

For each different dress cover or cushion buildup:

#### Leather:

- 75 square feet; or 12 pieces cut 32"x32"; or
- 85 sq. ft. window pane with leather close-out; or
- 80 sq. ft. fully encapsulated with 2" hook and loop

### Fabric:

- 40" 48", 6 yards
- 49" 53", 5 yards
- 54" or more, 4 yards

**Oil Burn:** All materials for oil burn must pass a vertical burn test. If you are supplying materials for an oil burn test, please provide enough material for the vertical burn test.

#### Additional charges will be assessed for receiving scrap pieces.

PLEASE NOTE: Extra leather or fabric may be required for composite panel testing. Additionally, you may be required to send a small quantity of your adhesive if it is not stocked at Skandia. We will make every effort to stock your glue.



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### **Step 5: Items Required to Complete Fire-Blocking - continued**

#### IS PADDING OR BATTING/MUSLIN USED ON SEATING SURFACES?

Only .25" padding/batting can be used on the OLA bottom cushion.

#### IF YES, HOW IS IT HELD IN PLACE?

Yes No Glued Placed Stitched at seams Quilted to dress cover

#### IF FIREBLOCKING MATERIAL IS BEING USED, HOW IS IT USED?

Glued on seating surface only

Placed on seating surface only

Fully Encapsulated with stitched seams

Fully Encapsulated with glued seams

Fully Encapsulated and bonded to foam

## **Step 6: Production Drawings**

If the original production drawings or the original report exist they must be sent either digitally or physically to Skandia.

#### DO YOU HAVE A COPY OF THE ORIGINAL REPORT OR COPIES OF THE ORIGINAL PRODUCTION DRAWINGS?

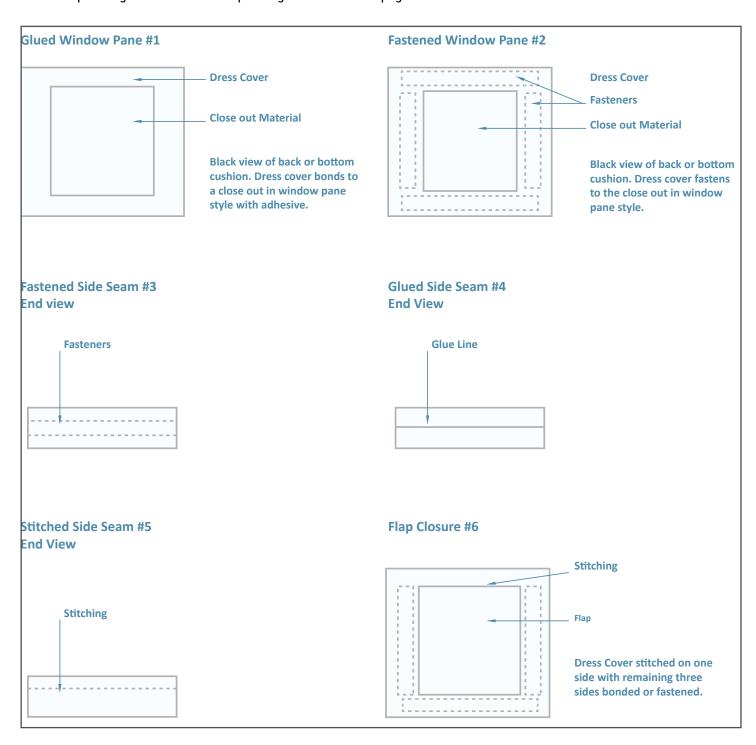
Yes No If yes, please provide accordingly

#### ORIGINAL FOAM ASSEMBLY DRAWING NUMBERS BELOW



## **Step 7: Seam Closure**

See example images and enter corresponding number on next page.





# **Step 7: Seam Closure - continued**

See example images and enter corresponding number on next page.

| SINGLE PASSENGER SEAT S<br>BACK     | EAM CLOSURE: Bottom     | If "window pane", what is the close-out material? |
|-------------------------------------|-------------------------|---|
| <b>DOUBLE PASSENGER SEAT S</b> BACK | SEAM CLOSURE:<br>Bottom | If "window pane", what is the close-out material? |
| DIVAN SEAT SEAM CLOSUR<br>BACK      | E:<br>Bottom            | If "window pane", what is the close-out material? |
| LAV SEAT SEAM CLOSURE:<br>BACK      | Bottom                  | If "window pane", what is the close-out material? |
| JUMPSEAT/FAS SEAM CLOS<br>BACK      | SURE:<br>Bottom         | If "window pane", what is the close-out material? |
| HEADREST SEAM CLOSURE               | :                       | If "window pane", what is the close-out material? |
| LEGREST/FOOTREST SEAM               | CLOSURE:                | If "window pane", what is the close-out material? |



## **Step 8: Matrix for Production Articles**

This section of the form deals with production information. Fill in vendors and part numbers, then select the appropriate box for each specimen with an X.

| DRESS COVER<br>Vendor        |       | Part #            |          |           |                          |                 |
|------------------------------|-------|-------------------|----------|-----------|--------------------------|-----------------|
|                              |       |                   |          |           | Invoices or packing slip | os enclosed?    |
| Pax Seats                    | Divan | Jump Seat/<br>FAS | Lav Seat | Head Rest | Foot Rest                | Flame Treatment |
| <b>DRESS COVER</b><br>Vendor |       | Part #            |          |           |                          |                 |
|                              |       |                   |          |           | Invoices or packing slip | os enclosed?    |
| Pax Seats                    | Divan | Jump Seat/<br>FAS | Lav Seat | Head Rest | Foot Rest                | Flame Treatment |
| <b>DRESS COVER</b><br>Vendor |       | Part #            |          |           |                          |                 |
|                              |       |                   |          |           | Invoices or packing slip | os enclosed?    |
| Pax Seats                    | Divan | Jump Seat/<br>FAS | Lav Seat | Head Rest | Foot Rest                | Flame Treatment |
| FOAM                         |       |                   |          |           |                          |                 |
| Vendor                       |       | Part #            |          |           |                          |                 |
|                              |       |                   |          |           | Invoices or packing slip | os enclosed?    |
| Pax Seats                    | Divan | Jump Seat/<br>FAS | Lav Seat | Head Rest | Foot Rest                | Flame Treatment |
| FOAM                         |       |                   |          |           |                          |                 |
| Vendor                       |       | Part #            |          |           |                          |                 |
|                              |       |                   |          |           | Invoices or packing slip | os enclosed?    |
| Pax Seats                    | Divan | Jump Seat/<br>FAS | Lav Seat | Head Rest | Foot Rest                | Flame Treatment |
| FOAM                         |       |                   |          |           |                          |                 |
| Vendor                       |       | Part #            |          |           |                          |                 |
|                              |       |                   |          |           | Invoices or packing slip | os enclosed?    |
| Pax Seats                    | Divan | Jump Seat/<br>FAS | Lav Seat | Head Rest | Foot Rest                | Flame Treatment |



## **Step 8: Matrix for Production Articles - continued**

This section of the form deals with production information. Fill in vendors and part numbers, then select the appropriate box for each specimen with an X.

| SCR         | IM-BACKED F | MAO   |                   |          |           |                        |                 |
|-------------|-------------|-------|-------------------|----------|-----------|------------------------|-----------------|
| Vend        | or          |       | Part #            |          |           |                        |                 |
|             |             |       |                   |          |           | Invoices or packing sl | ips enclosed?   |
|             | Pax Seats   | Divan | Jump Seat/<br>FAS | Lav Seat | Head Rest | Foot Rest              | Flame Treatment |
| BAT         | TING        |       | TAS               |          |           |                        |                 |
| Vend        | or          |       | Part #            |          |           |                        |                 |
|             |             |       |                   |          |           | Invoices or packing sl | ips enclosed?   |
|             | Pax Seats   | Divan | Jump Seat/<br>FAS | Lav Seat | Head Rest | Foot Rest              | Flame Treatment |
| MUS<br>Vend |             |       | Part #            |          |           |                        |                 |
|             |             |       |                   |          |           | Invoices or packing sl | ips enclosed?   |
|             | Pax Seats   | Divan | Jump Seat/        | Lav Seat | Head Rest | Foot Rest              | Flame Treatment |
| FIRE        | BLOCKER     |       | FAS               |          |           |                        |                 |
| Vend        | or          |       | Part #            |          |           |                        |                 |
|             |             |       |                   |          |           | Invoices or packing sl | ips enclosed?   |
|             | Pax Seats   | Divan | Jump Seat/<br>FAS | Lav Seat | Head Rest | Foot Rest              | Flame Treatment |
|             | ESIVE       |       | D #               |          |           |                        |                 |
| Vend        | or          |       | Part #            |          |           |                        |                 |
|             |             |       |                   |          |           | Invoices or packing sl | ips enclosed?   |
|             | Pax Seats   | Divan | Jump Seat/        | Lav Seat | Head Rest | Foot Rest              | Flame Treatment |
| FAS1        | ΓENER       |       | FAS               |          |           |                        |                 |
| Vend        | or          |       | Part #            |          |           |                        |                 |
|             |             |       |                   |          |           | Invoices or packing sl | ips enclosed?   |
|             | Pax Seats   | Divan | Jump Seat/<br>FAS | Lav Seat | Head Rest | Foot Rest              | Flame Treatment |
|             | ΓENER       |       |                   |          |           |                        |                 |
| Vend        | or          |       | Part #            |          |           |                        |                 |
|             |             |       |                   |          |           | Invoices or packing sl | ips enclosed?   |
|             | Pax Seats   | Divan |                   | Lav Seat | Head Rest | Foot Rest              | Flame Treatment |



**COMMENTS** 

# **16G Replacement Dress Cover Checklist** Flammability Testing & Certification

## **Step 8: Matrix for Production Articles - continued**

This section of the form deals with production information. Fill in vendors and part numbers, then select the appropriate box for each specimen with an X.

| <b>FASTENER</b><br>Vendor |       | Part #            |          |           |                         |                 |
|---------------------------|-------|-------------------|----------|-----------|-------------------------|-----------------|
|                           |       |                   |          |           | Invoices or packing sli | ps enclosed?    |
| Pax Seats                 | Divan | Jump Seat/        | Lav Seat | Head Rest | Foot Rest               | Flame Treatment |
| CLOSE-OUT FABRI           | С     | FAS               |          |           |                         |                 |
| Vendor                    |       | Part #            |          |           |                         |                 |
|                           |       |                   |          |           | Invoices or packing sli | ps enclosed?    |
| Pax Seats                 | Divan | Jump Seat/        | Lav Seat | Head Rest | Foot Rest               | Flame Treatment |
| ADHESIVE FASTER           | NER   | FAS               |          |           |                         |                 |
| Vendor                    |       | Part #            |          |           |                         |                 |
|                           |       |                   |          |           | Invoices or packing sli | ps enclosed?    |
| Pax Seats                 | Divan | Jump Seat/        | Lav Seat | Head Rest | Foot Rest               | Flame Treatment |
| OTHER                     |       | FAS               |          |           |                         |                 |
| Vendor                    |       | Part #            |          |           |                         |                 |
|                           |       |                   |          |           | Invoices or packing sli | ps enclosed?    |
| Pax Seats                 | Divan | Jump Seat/<br>FAS | Lav Seat | Head Rest | Foot Rest               | Flame Treatment |
| Item Material             |       |                   |          |           |                         |                 |
| OTHER                     |       |                   |          |           |                         |                 |
| Vendor                    |       | Part #            |          |           |                         |                 |
|                           |       |                   |          |           | Invoices or packing sli | ps enclosed?    |
| Pax Seats                 | Divan | Jump Seat/<br>FAS | Lav Seat | Head Rest | Foot Rest               | Flame Treatment |
| Item Material             |       |                   |          |           |                         |                 |

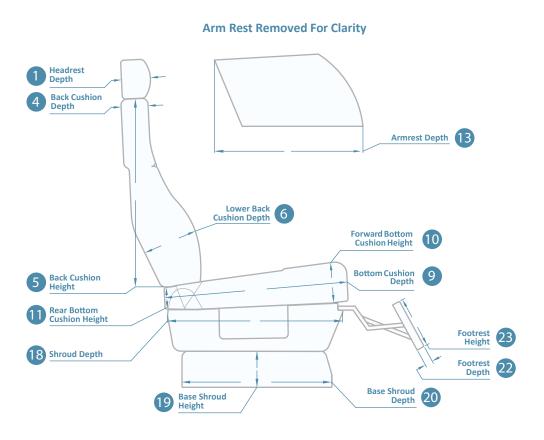
16G Replacement Dress Cover Checklist FL 106-18 Rev. L 09-15-17 Skandia INC | 5000 N Highway 251 | Davis Junction IL 61020 | Phone: 815.393.4600 | info@skandia.com

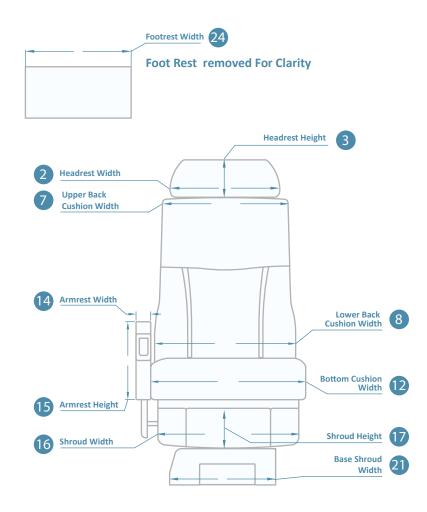


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## **Step 9: Single Seats Dimensions**

Enter in all seat dimensions according to the reference image provided.







# **Step 9: Single Seats Dimensions - continued**

Enter in all seat dimensions according to the reference image provided on page 10.

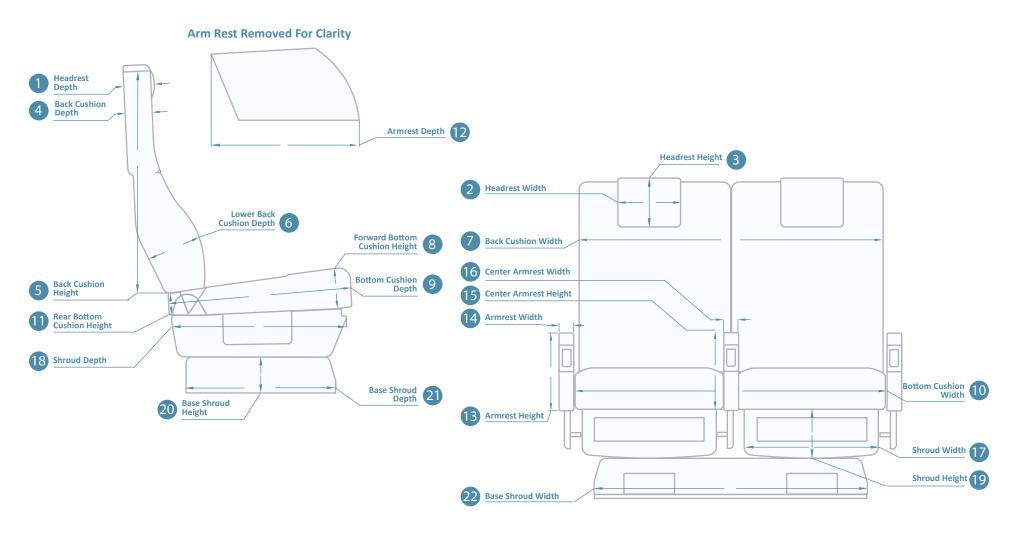
| 1: HEADREST DEPTH                    | 2: HEADREST WIDTH           | 3: HEADREST HEIGHT           |
|--------------------------------------|-----------------------------|------------------------------|
| 4: BACK CUSHION DEPTH                | 5: BACK CUSHION HEIGHT      | 6: LOWER BACK CUSHION HEIGHT |
| 7: UPPER BACK CUSHION WIDTH          | 8: LOWER BACK CUSHION WIDTH | 9: CUSHION DEPTH             |
| 10: FORWARD BOTTOM<br>CUSHION HEIGHT | 11: REAR CUSHION HEIGHT     | 12: BOTTOM CUSHION WIDTH     |
| 13: ARMREST DEPTH                    | 14: ARMREST WIDTH           | 15: ARMREST HEIGHT           |
| 16: SHROUD WIDTH                     | 17: SHROUD HEIGHT           | 18: SHROUD DEPTH             |
| 19: BASE SHROUD HEIGHT               | 20: BASE SHROUD DEPTH       | 21: BASE SHROUD WIDTH        |
| 22: FOOTREST DEPTH                   | 23: FOOTREST HEIGHT         | 24: FOOTREST WIDTH           |



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## **Step 10: Double Seats Dimensions**

Enter in all seat dimensions on page 13 according to the reference image provided below.





# **Step 10: Double Seats Dimensions - continued**

Enter in all seat dimensions according to the reference image provided on page 12.

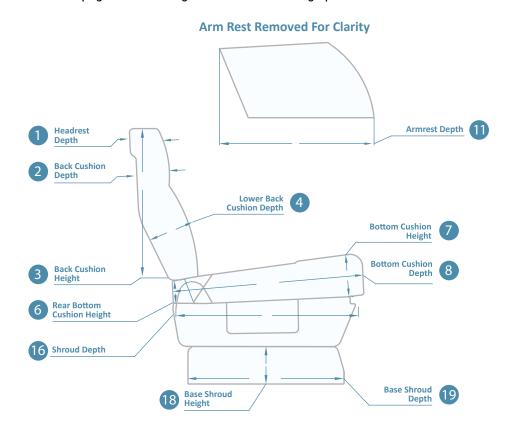
| 1: HEADREST DEPTH        | 2: HEADREST WIDTH              | 3: HEADREST HEIGHT          |
|--------------------------|--------------------------------|-----------------------------|
| 4: BACK CUSHION DEPTH    | 5: BACK CUSHION HEIGHT         | 6: LOWER BACK CUSHION DEPTH |
| 7: BACK CUSHION WIDTH    | 8: FORW. BOTTOM CUSHION HEIGHT | 9: BOTTOM CUSHION DEPTH     |
| 10: BOTTOM CUSHION WIDTH | 11: REAR BOTTOM CUSHION HEIGHT | 12: ARMREST DEPTH           |
| 13: ARMREST HEIGHT       | 14: ARMREST WIDTH              | 15: CENTER ARMREST HEIGHT   |
| 16: CENTER ARMREST WIDTH | 17: SHROUD WIDTH               | 18: SHROUD DEPTH            |
| 19: SHROUD HEIGHT        | 20: BASE SHROUD HEIGHT         | 21: BASE SHROUD DEPTH       |

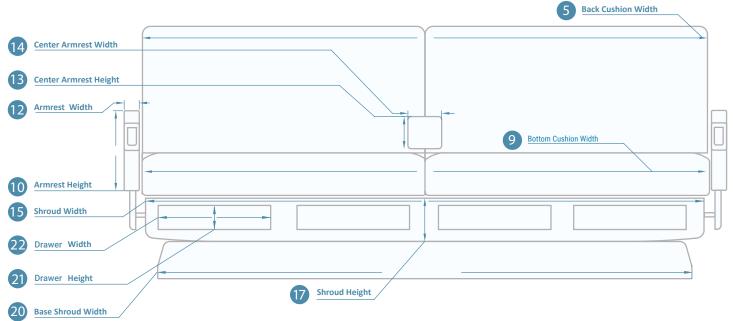
22: BASE SHROUD WIDTH



## **Step 11: Divan Seats Dimensions**

Enter in all seat dimensions on page 15 according to the reference image provided below.







22: DRAWER WIDTH

# **16G Replacement Dress Cover Checklist** Flammability Testing & Certification

# **Step 11: Divan Seats Dimensions - continued**

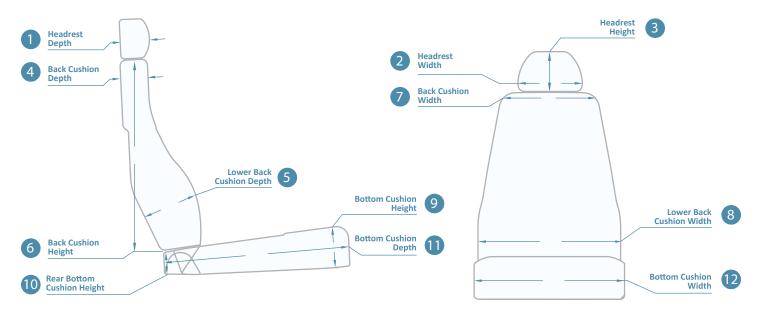
Enter in all seat dimensions according to the reference image provided on page 12.

| 1: HEADREST DEPTH           | 2: BACK CUSHION DEPTH    | 3: BACK CUSHION HEIGHT        |
|-----------------------------|--------------------------|-------------------------------|
| 4: LOWER BACK CUSHION DEPTH | 5: BACK CUSHION WIDTH    | 6: REAR BOTTOM CUSHION HEIGHT |
| 7: BOTTOM CUSHION HEIGHT    | 8: BOTTOM CUSHION DEPTH  | 9: BOTTOM CUSHION WIDTH       |
| 10: ARMREST HEIGHT          | 11: ARMREST DEPTH        | 12: ARMREST WIDTH             |
| 13: CENTER ARMREST HEIGHT   | 14: CENTER ARMREST WIDTH | 15: SHROUD WIDTH              |
| 16: SHROUD DEPTH            | 17: SHROUD HEIGHT        | 18: BASE SHROUD HEIGHT        |
| 19: BASE SHROUD DEPTH       | 20: BASE SHROUD WIDTH    | 21: DRAWER HEIGHT             |
|                             |                          |                               |



## **Step 12: Universal Seats Dimensions**

Enter in all seat dimensions on page 17 according to the reference image provided below.



1: HEADREST DEPTH 2: HEADREST WIDTH 3: HEADREST HEIGHT

4: BACK CUSHION DEPTH 5: LOWER BACK CUSHION DEPTH **6: BACK CUSHION HEIGHT** 

7: BACK CUSHION WIDTH 8: LOWER BACK CUSHION WIDTH 9: BOTTOM CUSHION HEIGHT

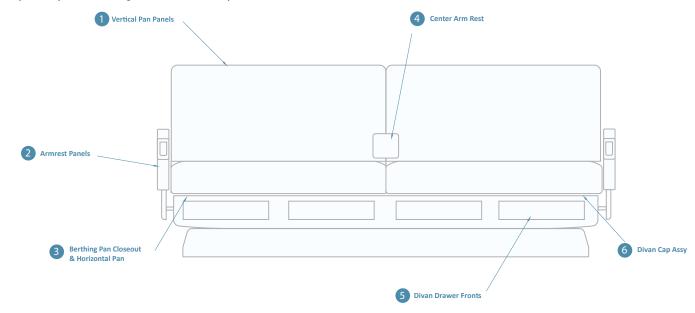
10: REAR BOTTOM CUSHION HEIGHT 11: BOTTOM CUSHION DEPTH 12: BOTTOM CUSHION WIDTH

**OTHER OTHER OTHER** 



## Step 13: Divan Substrate and/or Foam Build-Ups

Please list all materials used in production including substrates and adhesives. The information provided will be used for composite panel testing. Please include part number and thickness of materials.



1: VERTICAL PANELS

2: ARM REST

3: BERTHING PAN CLOSEOUT & **HORIZONTAL PAN** 

**4: CENTER ARM REST** 

**5: DIVAN DRAWER FRONTS** 

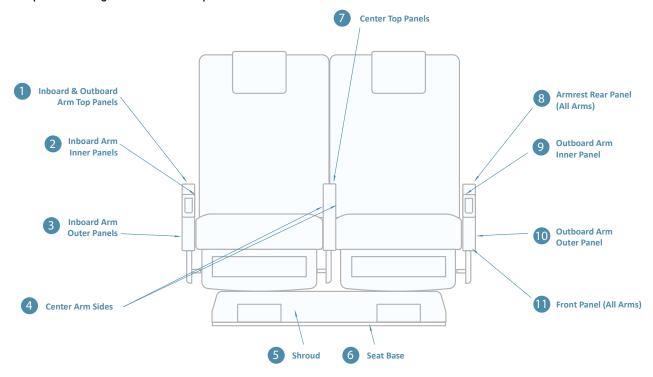
**6: DIVAN CAP ASSEMBLY** 

**DRESS COVERING** 



## **Step 14: Double Seat Composite Panel Production Buildup**

Please list all materials used in production including substrates and adhesives. The information provided will be used for composite panel testing. Please include part number and thickness of materials.



1: INBOARD & OUTBOARD ARM TOP **PANELS** 

2: INBOARD ARM INNER PANELS

3: INBOARD ARM OUTER PANELS

**4: CENTER ARM SIDES** 

5: SHROUD

**6: SEAT BASE** 



## **Step 14: Double Seat Composite Panel Production Buildup - continued**

Please list all materials used in production including substrates and adhesives. The information provided will be used for composite panel testing. Please include part number and thickness of materials.

7: CENTER TOPS PANELS 8: ARMREST REAR PANEL (ALL ARMS) 9: OUTBOARD ARM INNER PANEL

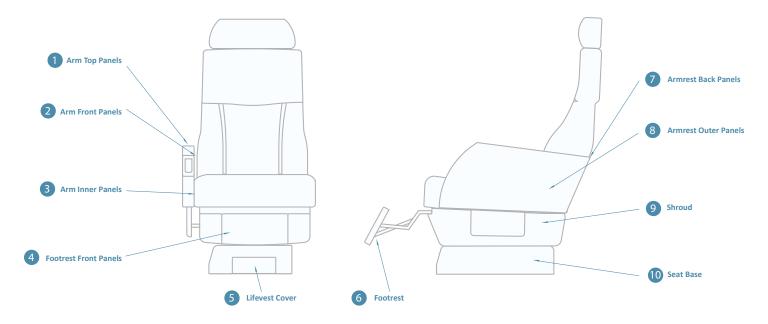
11: FRONT PANEL (ALL ARMS) 10: OUTBOARD ARM OUTER PANEL

**DRESS COVERING** 



## **Step 15: Single Seat Composite Panel Production Buildup**

Please list all materials used in production including substrates and adhesives. The information provided will be used for composite panel testing. Please include part number and thickness of materials.



1: ARM TOP PANELS

2: ARM FRONT PANELS

3: ARM INNER PANELS

**4: FOOTREST FRONT PANEL** 

5: LIFEVEST COVER

6: FOOTREST



## Step 15: Single Seat Composite Panel Production Buildup - continued

Please list all materials used in production including substrates and adhesives. The information provided will be used for composite panel testing. Please include part number and thickness of materials.

7: ARMREST BACK PANELS 8: ARMREST OUTER PANELS 9: SHROUD

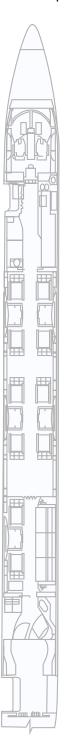
**10: SEAT BASE** 

**DRESS COVERING** 



## **Step 16: Seat Location**

We need to know the placement of each seat in the aircraft along with the serial number and part number of each seat on the aircraft. Please include part number and thickness of materials.



Please fill in accordingly

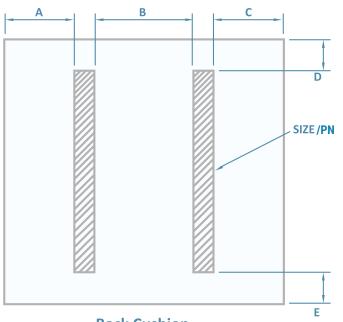


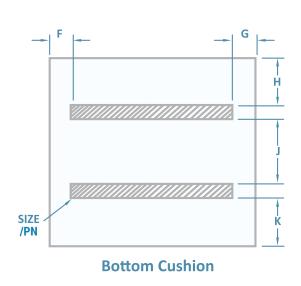


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## **Step 17: Hook and Loop Placement**

Referring back to Page 3, it is very important to simulate the placement of any hook and loop attachment strips that may attach either back or bottom assemblies to the seat frame. Please document dimensional placement. Note which direction is the front of the cushion and if 1" or 2" fasteners are being used along with length of fastener attachment strips. Please fill this out for each type of seat being tested.





## Back Cushion

#### **BACK CUSHION**

A B C

D E Direction

Fastener Length Fastener Part #

#### **BOTTOM CUSHION**

F G H

J K Direction

Fastener Length Fastener Part #

# IS HOOK OR LOOP BEING USED FOR ATTACH STRIPS ON CUSHION?

Hook Loop

### IS THE HOOK AND LOOP NEW OR EXISTING?

New Existing

# IS THE ATTACH STRIP FASTENER ON THE SEAT FRAME NEW OR EXISTING?

New Existing