

# Identification of Specimens

OB\_TC\_R010 rev. 002

**Confidential**



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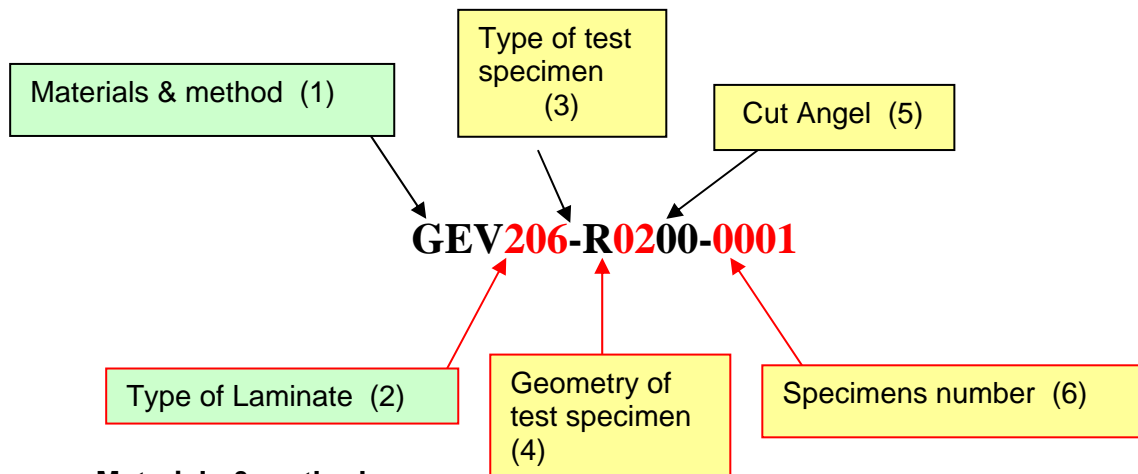
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Change record

Issue/revision	date	pages	Summary of changes
1	14-02-03	Na	na
2		9	Optimat formatting, compacted first two pages into one; Changed D01 to D12, geometry of Risø dogbone has minimum width of 25 mm instead of 20 mm.



**1) Materials & method**

**G:** Glasfibre **E:** Epoxy **V:** Vacuuminjection

**2) Type of Laminate**

Definition of Laminate		
Laminate Code	Laminate Lay Up	Materials
GEV206	$[0^\circ]_4$	Combi1250
GEV207	$[\pm 45^\circ/0^\circ]_3 / \pm 45^\circ$	Combi1250 & Biaxial 806
GEV208	$[+45^\circ/-45^\circ/-45^\circ/+45^\circ]$	Combi1250
GEV209	$[0^\circ]_{57}$	Combi 1250
GEV210	$[\pm 45^\circ/0^\circ]_{33} / \pm 45^\circ$	Combi1250 & Biaxial 806
GEV211	$[0^\circ]_2$	Combi 1250
GEV212	$[0^\circ]_3$	Combi 1250
GEV213	$[0^\circ]_7$	Combi 1250
GEV214		
GEV215		

**3) Type of Test specimen**

**R:** Rectangular  
**D:** Dogbone  
**I :** ISO or ASTM  
**S:** Special  
**T:** Thick geometry

**4) Geometry of specimen**

See appendix A

**5) Cut angel**

The two digit indicate the relative angel between the  $0^\circ$  fiber direction and the  $0^\circ$  direction of test specimen.

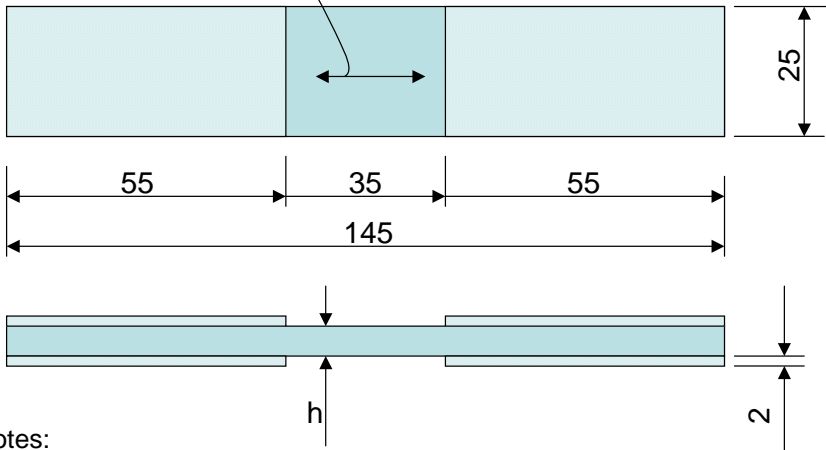
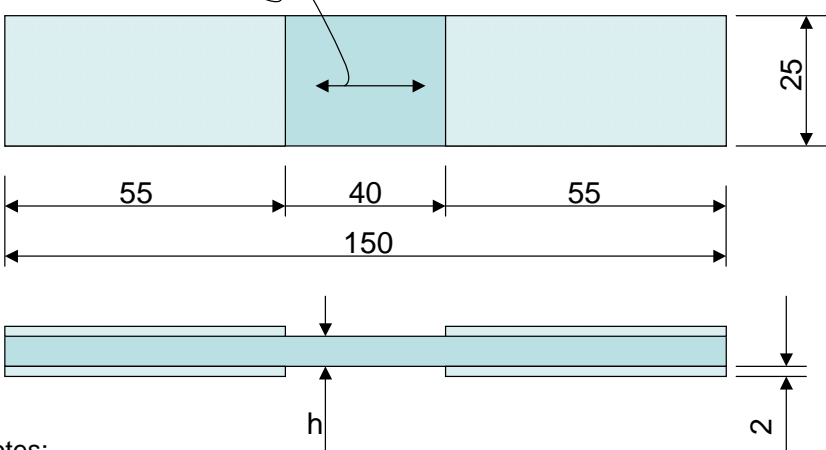
**6) Specimen number**

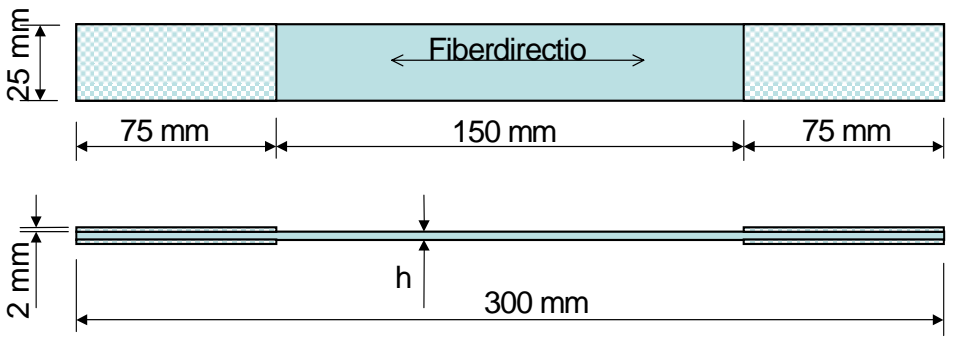
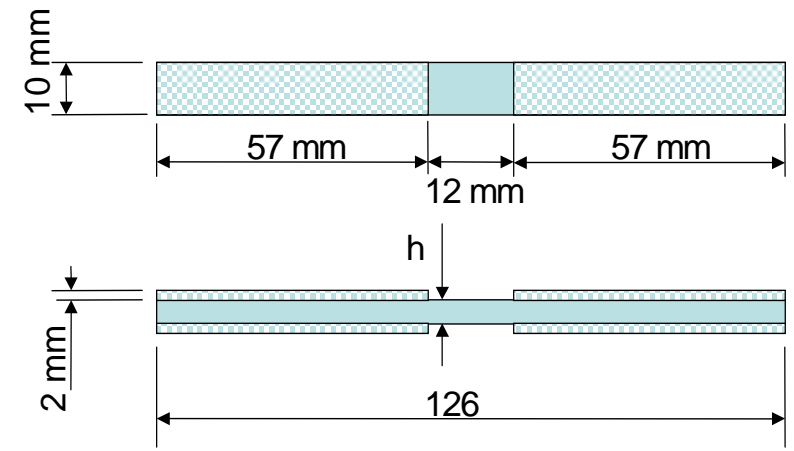
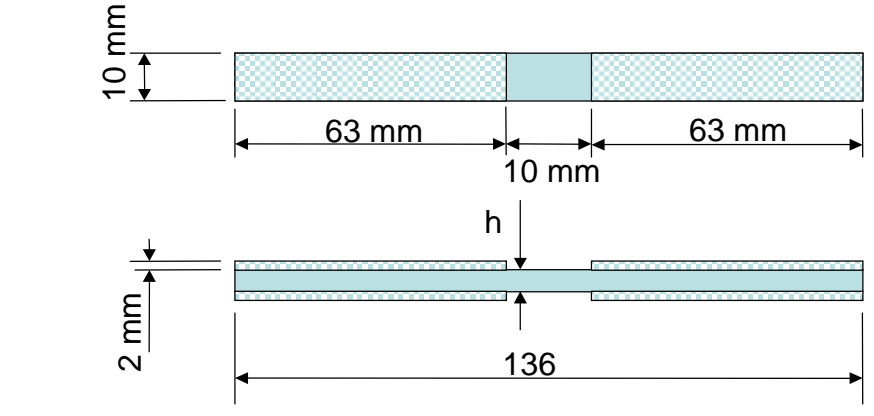
The last four digits indicate the consecutive numbers for the specific laminate and geometry.

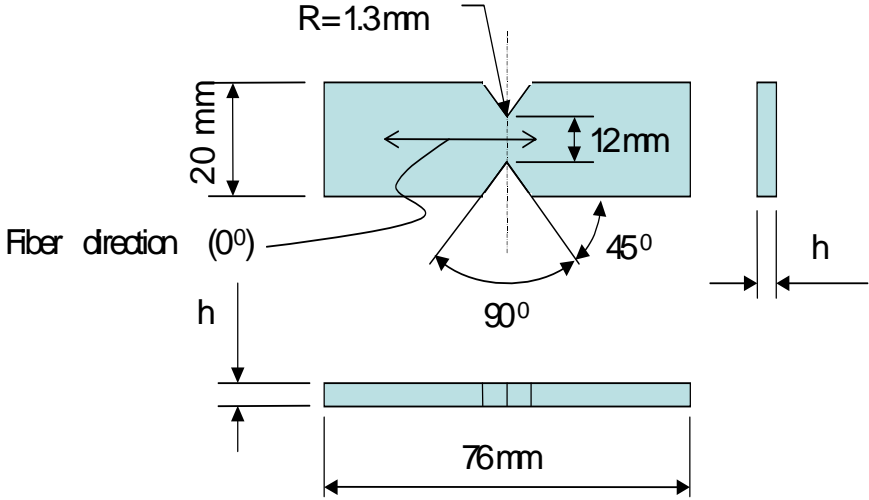
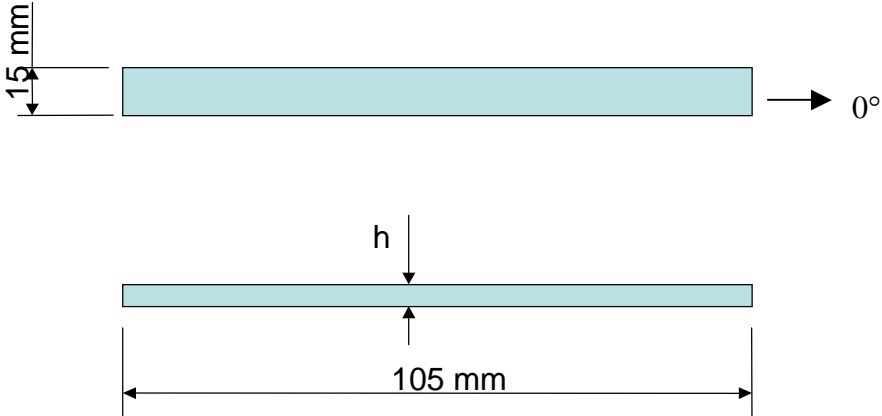
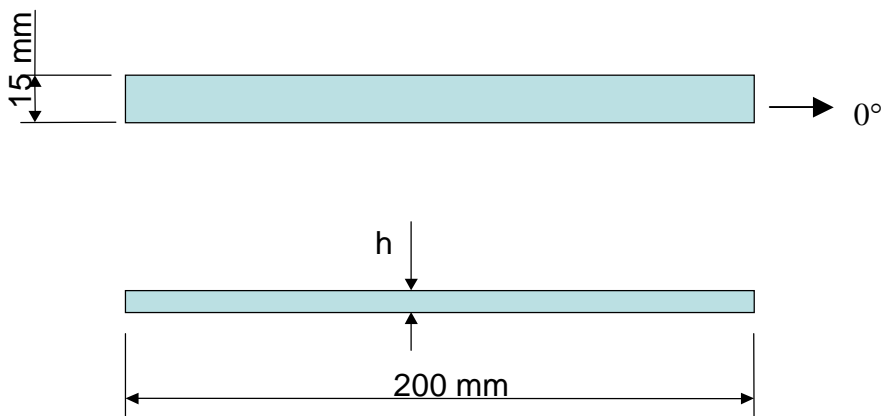


## **Appendix A**

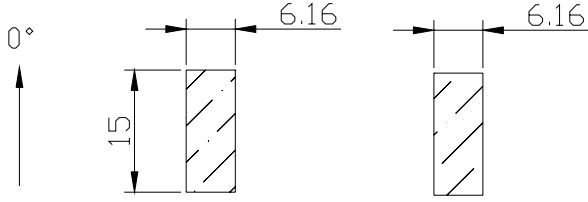
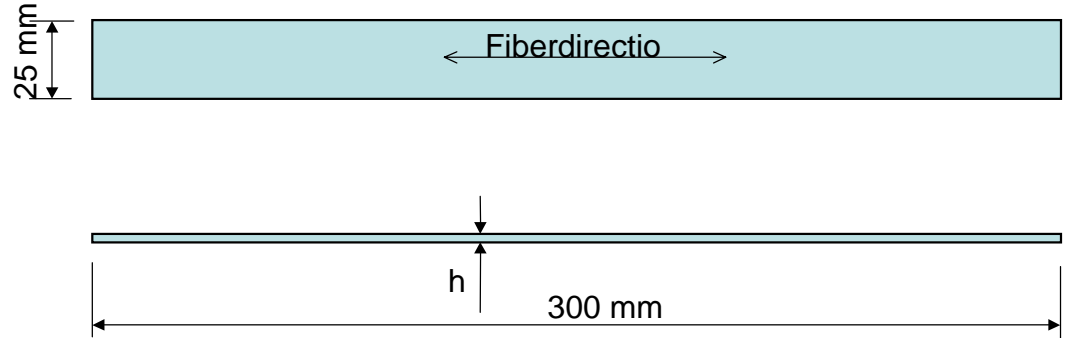
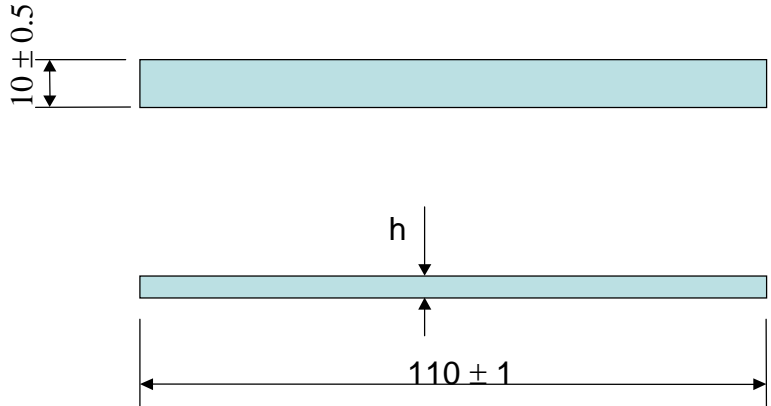
# **Geometry of Specimens**

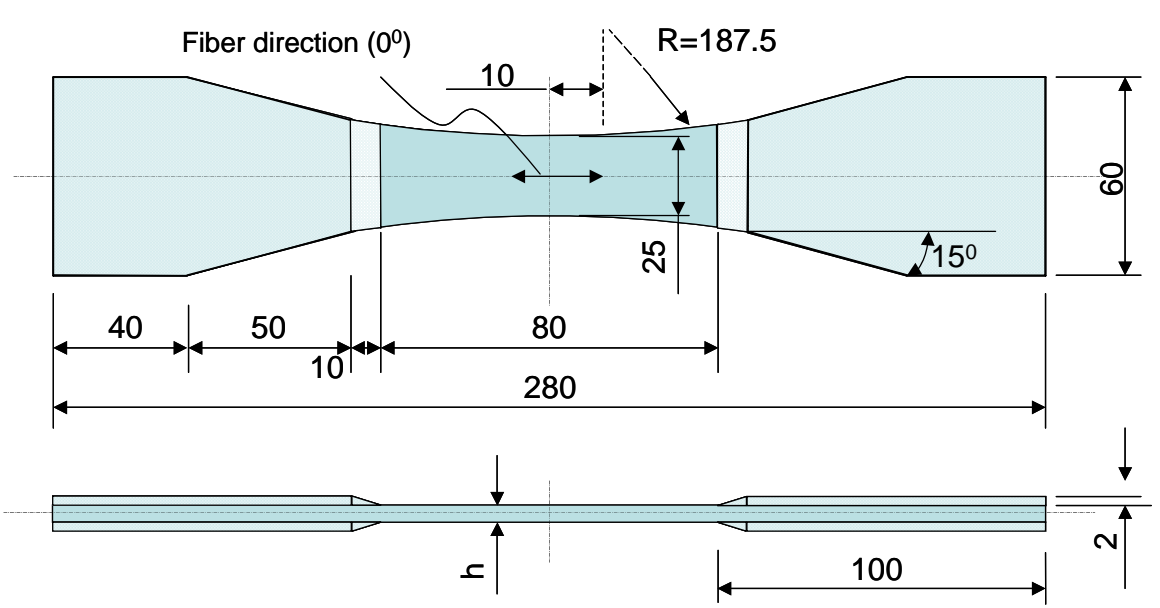
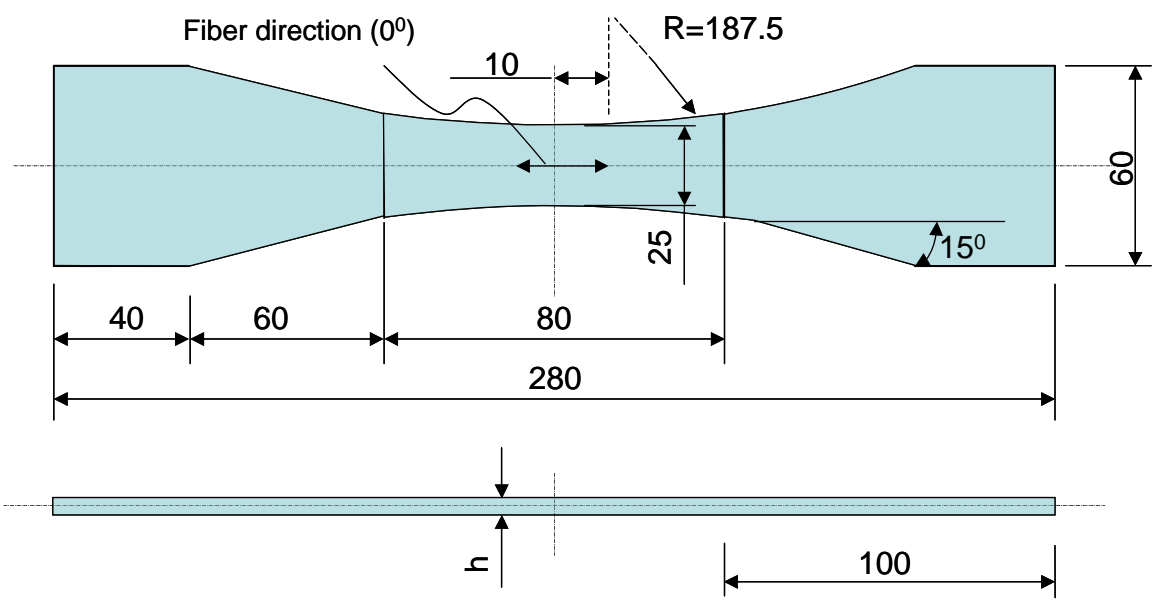
Specimen Code	Geometry of Specimen
R03	<p>Principal direction (<math>0^{\circ}</math>)</p>  <p>Notes:</p>
R04	<p>Principal direction (<math>0^{\circ}</math>)</p>  <p>Notes:</p>

Specimen Code	Geometry of Specimen
I01	 <p>           The diagram shows the geometry of specimen I01. The top view is a rectangle with a total length of 300 mm and a height of 25 mm. It is divided into three sections: two end sections of 75 mm each and a central section of 150 mm. The central section is labeled 'Fiberdirectio' with arrows pointing left and right. The bottom view shows a specimen with a total length of 300 mm and a thickness of 2 mm. The central section has a height of <math>h</math>.         </p>
I02 (RISØ)	 <p>           The diagram shows the geometry of specimen I02 (RISØ). The top view is a rectangle with a total length of 126 mm and a height of 10 mm. It is divided into three sections: two end sections of 57 mm each and a central section of 12 mm. The bottom view shows a specimen with a total length of 126 mm and a thickness of 2 mm. The central section has a height of <math>h</math>.         </p>
I03 (TUD)	 <p>           The diagram shows the geometry of specimen I03 (TUD). The top view is a rectangle with a total length of 136 mm and a height of 10 mm. It is divided into three sections: two end sections of 63 mm each and a central section of 10 mm. The bottom view shows a specimen with a total length of 136 mm and a thickness of 2 mm. The central section has a height of <math>h</math>.         </p>

Specimen Code	Geometry of Specimen
I04	 <p>Diagram of specimen I04 geometry. The specimen is a rectangular plate with a central notch. The notch has a radius <math>R=1.3\text{mm}</math>. The width of the specimen is <math>76\text{mm}</math>. The height is <math>h</math>. The notch depth is <math>20\text{mm}</math>. The notch width is <math>12\text{mm}</math>. The fiber direction is <math>0^\circ</math>. The notch is cut at a <math>45^\circ</math> angle, resulting in a <math>90^\circ</math> notch angle. A side view shows the thickness <math>h</math>.</p>
I05	 <p>Diagram of specimen I05 geometry. The specimen is a rectangular plate with a width of <math>105\text{mm}</math> and a height of <math>h</math>. The thickness is <math>15\text{mm}</math>. The fiber direction is <math>0^\circ</math>.</p>
I06	 <p>Diagram of specimen I06 geometry. The specimen is a rectangular plate with a width of <math>200\text{mm}</math> and a height of <math>h</math>. The thickness is <math>15\text{mm}</math>. The fiber direction is <math>0^\circ</math>.</p>



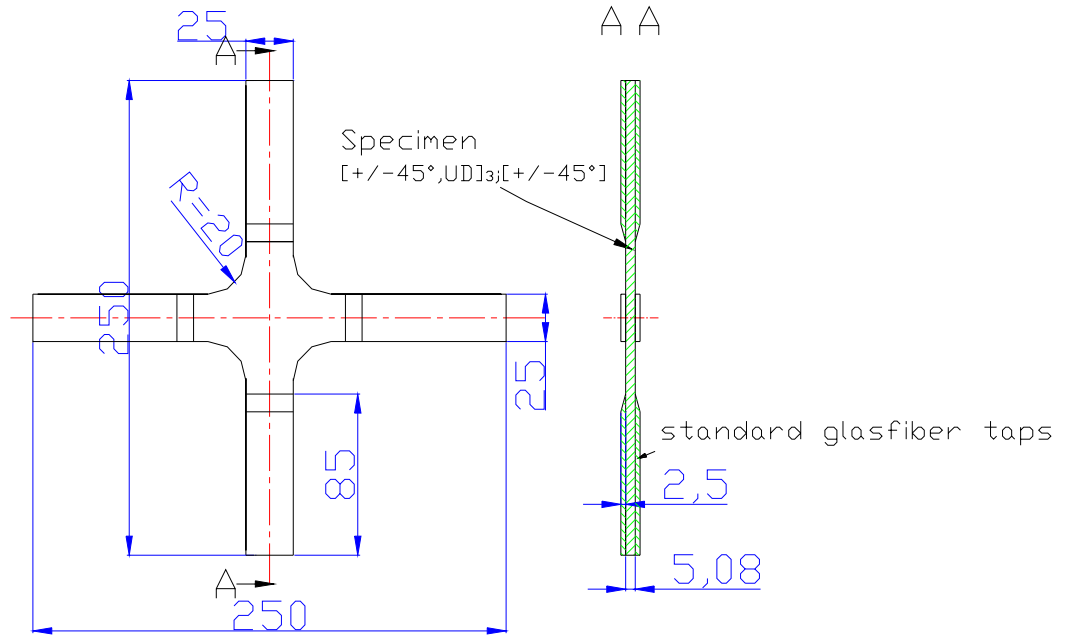
Specimen Code	Geometry of Specimen
I07	 <p>Diagram of specimen I07 showing a cross-section with a 0 degree angle, a height of 15, and two widths of 6.16.</p>
I11	 <p>Diagram of specimen I11 showing a length of 300 mm and a thickness of h. The fiber direction is indicated by a double-headed arrow labeled "Fiberdirectio".</p>
I12	 <p>Diagram of specimen I12 showing a length of 110 ± 1 and a thickness of 10 ± 0.5.</p>

<b>Specimen Code</b>	Geometry of Specimen
D02	 <p>           Fiber direction (<math>0^\circ</math>)  <math>R=187.5</math>            10            25  <math>15^\circ</math>            40            50            10            80            280  <math>r</math>            100            2            60         </p>
D12	 <p>           Fiber direction (<math>0^\circ</math>)  <math>R=187.5</math>            10            25  <math>15^\circ</math>            40            60            80            280  <math>r</math>            100            60         </p>





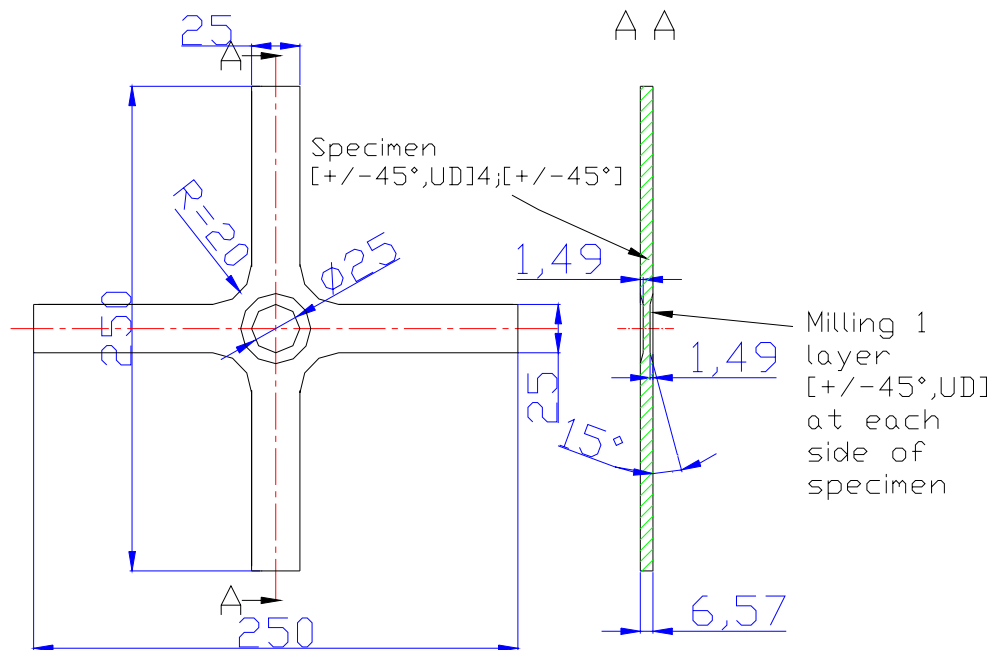
S01  
Geometry 2



Specimen  
Code

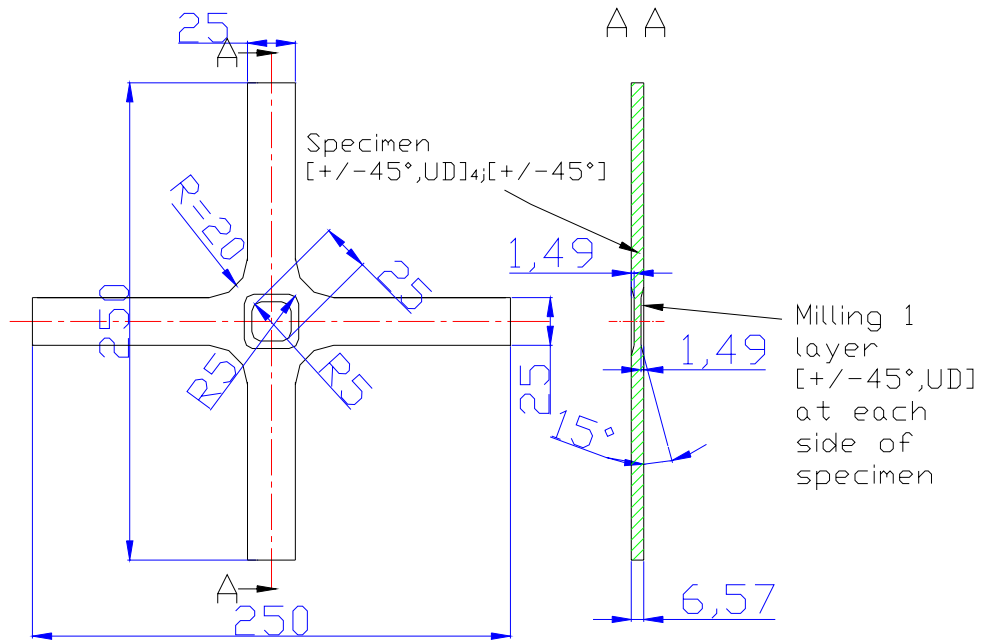
Geometry of Specimen

S01  
Geometry 3





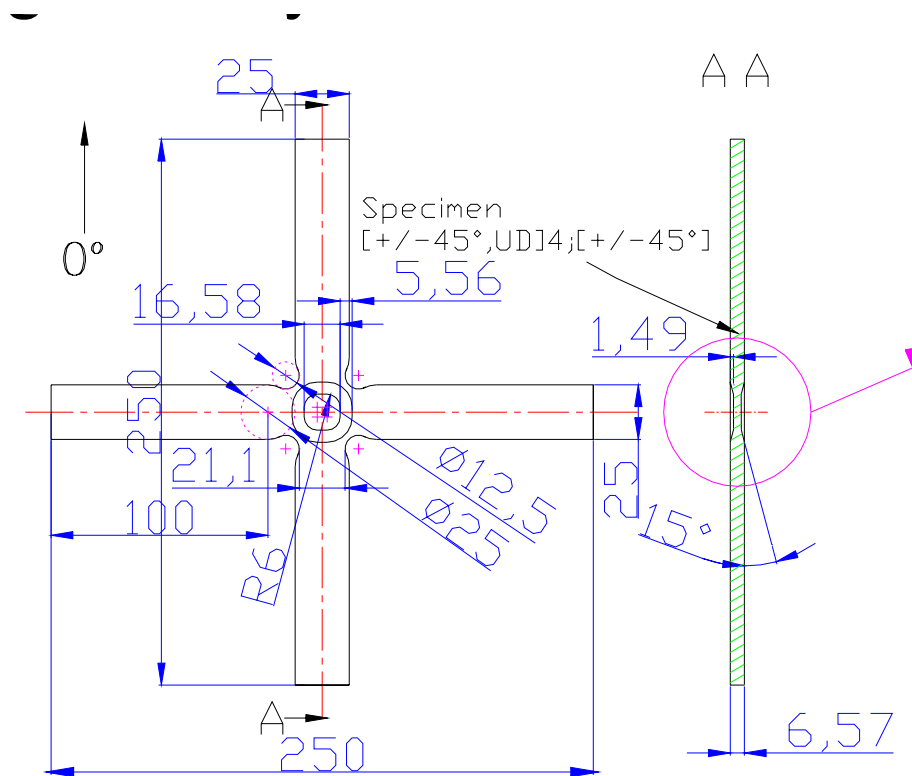
S01  
Geometry 4



Specimen  
Code

Geometry of Specimen

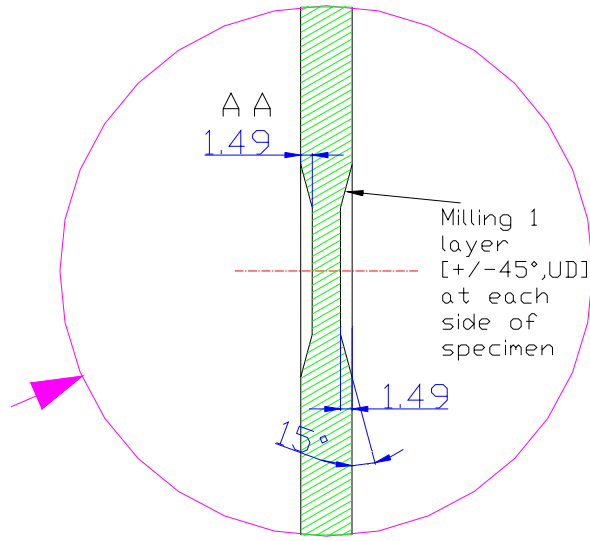
S01  
Geometry 5





S01

Geometry 5

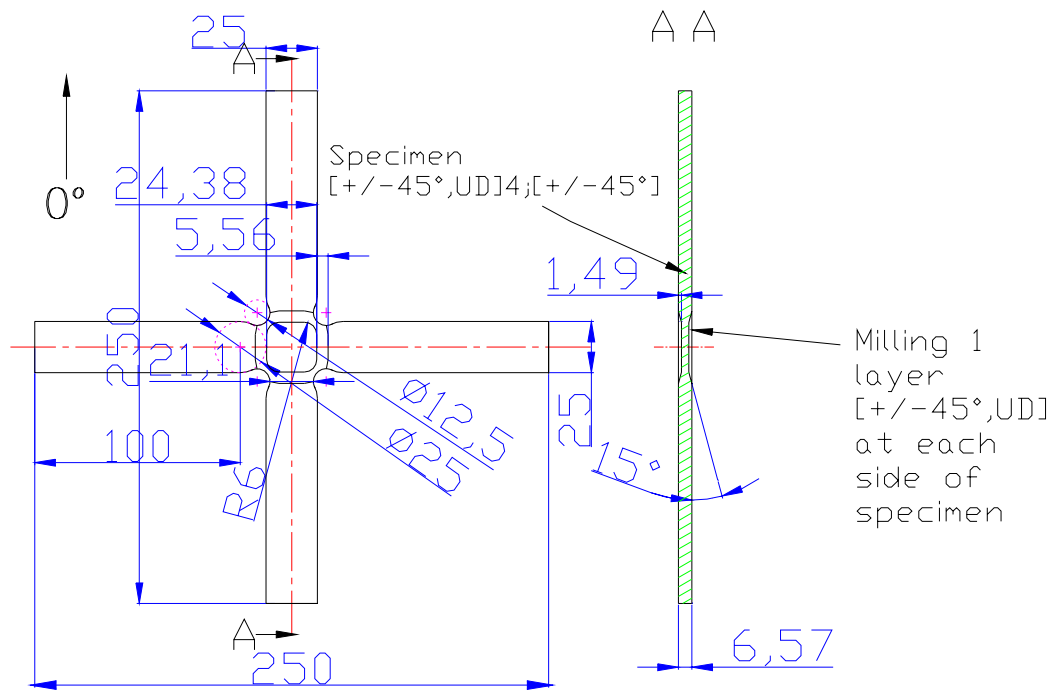


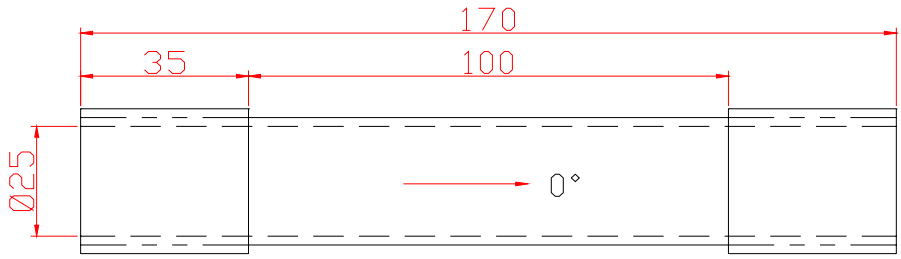
Specimen Code

Geometry of Specimen

S01

Geometry 7



Specimen Code	Geometry of Specimen
S02	 <p>The diagram shows a cylindrical specimen with a diameter of 25. The total length is 170. It features two end sections, each 35 units long. The distance between the inner faces of these end sections is 100 units. A red arrow points to the right, labeled 0°, indicating the fiber orientation.</p>