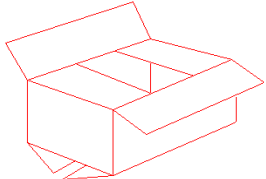


[mm']

l:	200
w:	200
h:	100

F0201



Material no.: 4711.4057  
Specification Code: Box B fluting 200 x 200 x 100

<p><b>A. ASTM D7386 - 16 Schedule D1—Vibration Under Compressive Load</b></p> $L = Mf * J * \frac{l * w * h}{K} * \frac{H - h}{h} * F$ <p>Mf: 192.22; K: 1; H: 2.74; F: 0.5</p>	<p>1) To pass the ASTM D4169-23e1 Schedule C tests , the container must have a static <b>Box Crash Test</b> in [N].</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">L [N] needed to ensure AL III in section B.</td> <td style="width: 33%;">L [N] needed to ensure AL II in section B.</td> <td style="width: 33%;">L [N] needed to ensure AL I in section B.</td> </tr> <tr> <td style="text-align: center;">1'008,8</td> <td style="text-align: center;">1'412,4</td> <td style="text-align: center;">2'017,7</td> </tr> </table>	L [N] needed to ensure AL III in section B.	L [N] needed to ensure AL II in section B.	L [N] needed to ensure AL I in section B.	1'008,8	1'412,4	2'017,7
L [N] needed to ensure AL III in section B.	L [N] needed to ensure AL II in section B.	L [N] needed to ensure AL I in section B.					
1'008,8	1'412,4	2'017,7					

<p><b>B. ASTM D4169-23e1 Schedule C - Vehicle Stacking</b></p> $L = Mf * J * \frac{l * w * h}{K} * \frac{H - h}{h} * F$ <p>Mf: 192.2 K: 1 H: 2.7 F: [(AL III 5; AL II 7; AL I 10)]</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="3" style="text-align: center;">computed load, L [N] acc. To equitation</th> </tr> <tr> <th style="width: 33%;">AL III</th> <th style="width: 33%;">AL II</th> <th style="width: 33%;">AL I</th> </tr> <tr> <td style="text-align: center;">979,5</td> <td style="text-align: center;">1'371,2</td> <td style="text-align: center;">1'958,9</td> </tr> </table> <p style="text-align: center;">Assuming that calculated L [N] for AL III from section A is selected: "Which AL level in ASTM D4169-23e1 Schedule C - Vehicle Stacking is applicable?"</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; background-color: green; text-align: center;">Yes</td> <td style="width: 33%; background-color: red; text-align: center;">No</td> <td style="width: 33%; background-color: red; text-align: center;">No</td> </tr> </table> <p>Distribution of density for freight acc. to <span style="display: block; text-align: right;">of all freight</span></p>	computed load, L [N] acc. To equitation			AL III	AL II	AL I	979,5	1'371,2	1'958,9	Yes	No	No
computed load, L [N] acc. To equitation													
AL III	AL II	AL I											
979,5	1'371,2	1'958,9											
Yes	No	No											

<p><b>C.</b></p> <p>Euro-pallet 800 x 1200 mm, max . loading at height 1,4 m; "Does the L [N] for AL III from section B covers shipment of an Euro-pallet 800 x 1200 mm; dynamic payload 1000 kg?"</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 20%;"># layer</th> <th style="width: 20%;">max. amount of containers per layer:</th> <th style="width: 20%;">max. amount of containers on the pallet</th> </tr> <tr> <td style="text-align: center;">12</td> <td style="text-align: center;">24</td> <td style="text-align: center;">288</td> </tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; background-color: green; text-align: center;">Yes</td> <td style="width: 33%; background-color: orange;">actual Mf [kg/m3]:</td> <td style="width: 33%; background-color: orange;">safy factor to AL III</td> </tr> <tr> <td></td> <td style="text-align: center;">625,0</td> <td style="text-align: center;">1,54</td> </tr> </table> <p style="text-align: right;">max. mass of container not &gt; than 20 [kg] , gross <b>2,5</b></p>	# layer	max. amount of containers per layer:	max. amount of containers on the pallet	12	24	288	Yes	actual Mf [kg/m3]:	safy factor to AL III		625,0	1,54
# layer	max. amount of containers per layer:	max. amount of containers on the pallet											
12	24	288											
Yes	actual Mf [kg/m3]:	safy factor to AL III											
	625,0	1,54											

<p><b>D. ASTM D4169-23e1 Schedule B - Warehouse Stacking</b></p> $L = M * J * \frac{H - h}{h} * F$ <p>F: [(AL III 3; AL II 4.5; AL I 8)]</p> <p>Height 2,7 m Height 1,9 m Height 1,4 m (high rack size)</p>	<p style="text-align: center;">Assuming that calculated L [N] for AL III from section B is selected: "What should be the maximum mass [kg] of one shipping unit to pass Schedule B - Warehouse Stacking?"</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 33%;">AL III</th> <th style="width: 33%;">AL II</th> <th style="width: 33%;">AL I</th> </tr> <tr> <td style="text-align: center;">1,3</td> <td style="text-align: center;">0,9</td> <td style="text-align: center;">0,5</td> </tr> <tr> <td style="text-align: center;">1,8</td> <td style="text-align: center;">1,2</td> <td style="text-align: center;">0,7</td> </tr> <tr> <td style="text-align: center;">2,5</td> <td style="text-align: center;">1,7</td> <td style="text-align: center;">1,0</td> </tr> </table>	AL III	AL II	AL I	1,3	0,9	0,5	1,8	1,2	0,7	2,5	1,7	1,0
AL III	AL II	AL I											
1,3	0,9	0,5											
1,8	1,2	0,7											
2,5	1,7	1,0											