



## Nirvana Technologies Pvt. Ltd.

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### PLUS 2D Nesting Software Optimization Report

#### General Details:

Project Name	
File Name	//Server/dev-nirvanatec.com/downloads/plus2d/samples/bulletproofglass2.plj
Job No	
Customer	
CustomerId	
Created By	
Approved By	
Date	Wednesday, July 21, 2010
Material	glass
Thk	12
PLUS 2D Version No.	8.68

**Stock Details:**

<b>Id</b>	<b>Length</b>	<b>Width</b>	<b>Cost</b>	<b>Qty</b>	<b>Remarks</b>
Vidro 3mm	3210	2400	24036.48	100	

**Part Details:**

<b>Name</b>	<b>Fin. Length</b>	<b>Fin. Width</b>	<b>Rotn</b>	<b>Qty</b>	<b>Type</b>	<b>Remarks</b>
H0277-KP	1383	899	1	10	DXF	071A090 2
H0285-KP	1305	802	1	10	DXF	130B090 2
H0271-KP	975	548	1	10	DXF	071A010 2
H0273-KP	642	527	1	9	DXF	071A030 2
H0281-KP	590	517	1	10	DXF	130B030 2
H0280-KP	863	512	1	10	DXF	130B020 2
H0275-KP	317	407	1	10	DXF	071A050 2

**Summary of Optimization Results:**

<b>Summary of Optimization Results:</b>	
Grinding Margin	15
Saw Width	0
Number of Layouts	5
Number of Stock Used	6
Total Utilization	70.16 %
Total Parts Required	69
Total Parts Nested	69
Reusable Offcuts	0
Total Stock Area	46.22
Total Part Area	32.43
Offcut Area	0
Scrap Area	13.79
Total Stock Weight	1442.19
Total Part Weight	1011.81
Total Offcut Weight	0
Total Scrap Weight	430.37
ScrapWt/PartWt	42.53 %

### Summary of Layouts:

No	Name	Qty	Util%	Cost	Parts	Offcut Qty - Size
1	Vidro 3mm	1	72.87	24036.48	9	0
2	Vidro 3mm	2	72.17	48072.96	20	0
3	Vidro 3mm	1	71.20	24036.48	13	0
4	Vidro 3mm	1	71.06	24036.48	12	0
5	Vidro 3mm	1	61.48	24036.48	15	0

**Parts Summary Table:**

No	Name	Size (L x W)	Nested (Required)	Area	Weight	Remarks
1	H0277-KP	1383 x 899	10 (10)	10.15	949.9	071A0902
2	H0285-KP	1305 x 802	10 (10)	8.93	835.94	130B0902
3	H0271-KP	975 x 548	10 (10)	3.98	372.2	071A0102
4	H0273-KP	642 x 527	9 (9)	2.68	250.7	071A0302
5	H0281-KP	590 x 517	10 (10)	2.61	243.87	130B0302
6	H0280-KP	863 x 512	10 (10)	3.15	294.75	130B0202
7	H0275-KP	317 x 407	10 (10)	0.94	88.09	071A0502
		Total	69 (69)	32.43	3035.44	

**Stocks used details:**

No	Name	Length	Width	Avail Qty	Utl Qty	Area
1	Vidro 3mm	3210	2400	100	6	46.22
	Total				6	46.22

**Offcut Details :**

Id	Length	Width	Cost	Qty	Area
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**Parts Cut List:**

<b>Name</b>	<b>Length</b>	<b>Width</b>	<b>Qty</b>	<b>Remarks Layout-Qty</b>
H0277-KP	1383	899	10	4-4/3-1/2-2/1-3
H0285-KP	1305	802	10	3-2/2-6/1-2
H0271-KP	975	548	10	5-5/3-3/2-2
H0273-KP	642	527	9	5-1/2-6/1-2
H0281-KP	590	517	10	5-3/3-5/2-2
H0280-KP	863	512	10	5-5/4-3/2-2
H0275-KP	317	407	10	5-1/4-5/3-2/1-2

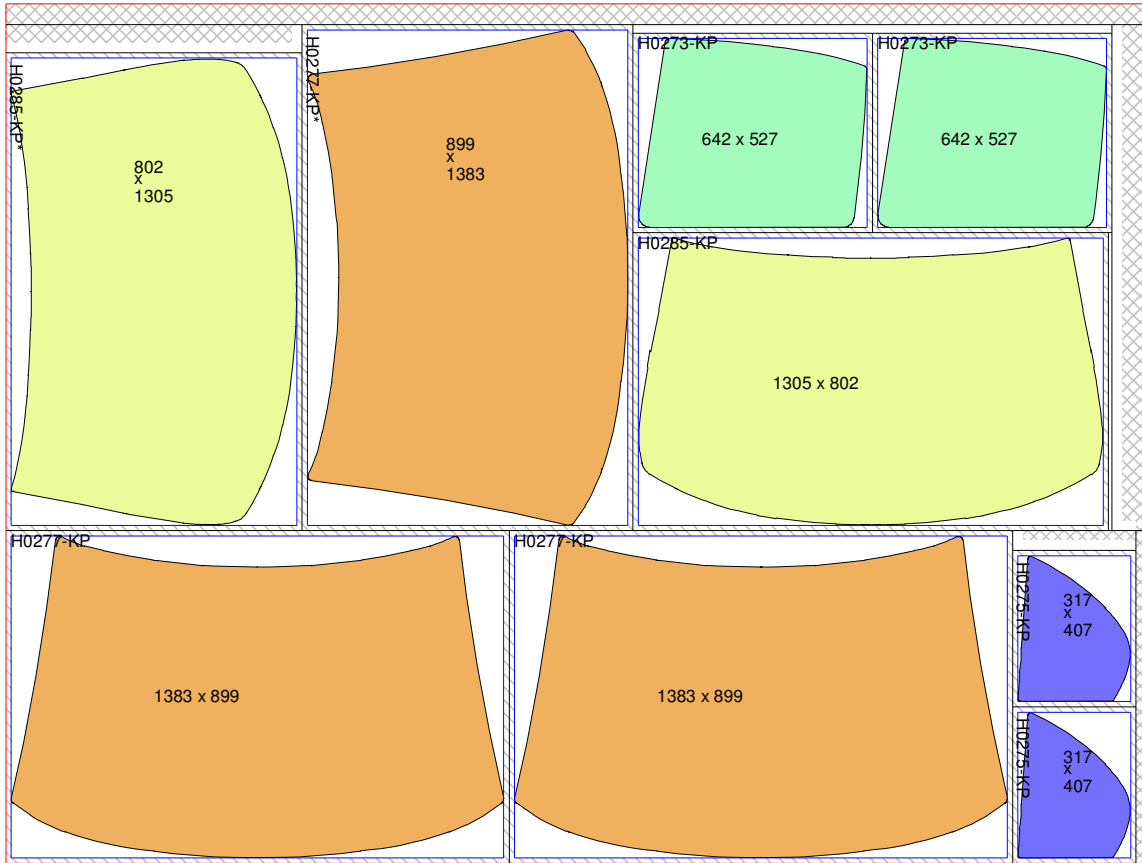
**Detailed table about Stocks & Parts:**

No	Stk Length	Stk Width	Stk Area	Prt Length	Prt Width	Qty	Part Area	Name
1	3210	2400	7.7					
				1383	899	3	3.04	H0277-KP
				1305	802	2	1.79	H0285-KP
				642	527	2	0.6	H0273-KP
				317	407	2	0.19	H0275-KP
			72.87 %				5.61	
2	3210	2400	7.7					
				1383	899	1	1.01	H0277-KP
				1305	802	3	2.68	H0285-KP
				975	548	1	0.4	H0271-KP
				642	527	3	0.89	H0273-KP
				590	517	1	0.26	H0281-KP
				863	512	1	0.31	H0280-KP
			72.17 %				5.56	
3	3210	2400	7.7					
				1383	899	1	1.01	H0277-KP
				1305	802	2	1.79	H0285-KP
				975	548	3	1.19	H0271-KP
				590	517	5	1.3	H0281-KP
				317	407	2	0.19	H0275-KP
			71.20 %				5.48	
4	3210	2400	7.7					
				1383	899	4	4.06	H0277-KP
				863	512	3	0.94	H0280-KP
				317	407	5	0.47	H0275-KP
			71.06 %				5.47	
5	3210	2400	7.7					

No	Stk Length	Stk Width	Stk Area	Prt Length	Prt Width	Qty	Part Area	Name
				975	548	5	1.99	H0271-KP
				642	527	1	0.3	H0273-KP
				590	517	3	0.78	H0281-KP
				863	512	5	1.57	H0280-KP
				317	407	1	0.09	H0275-KP
			61.48 %				4.74	



**Details of each Layout:**



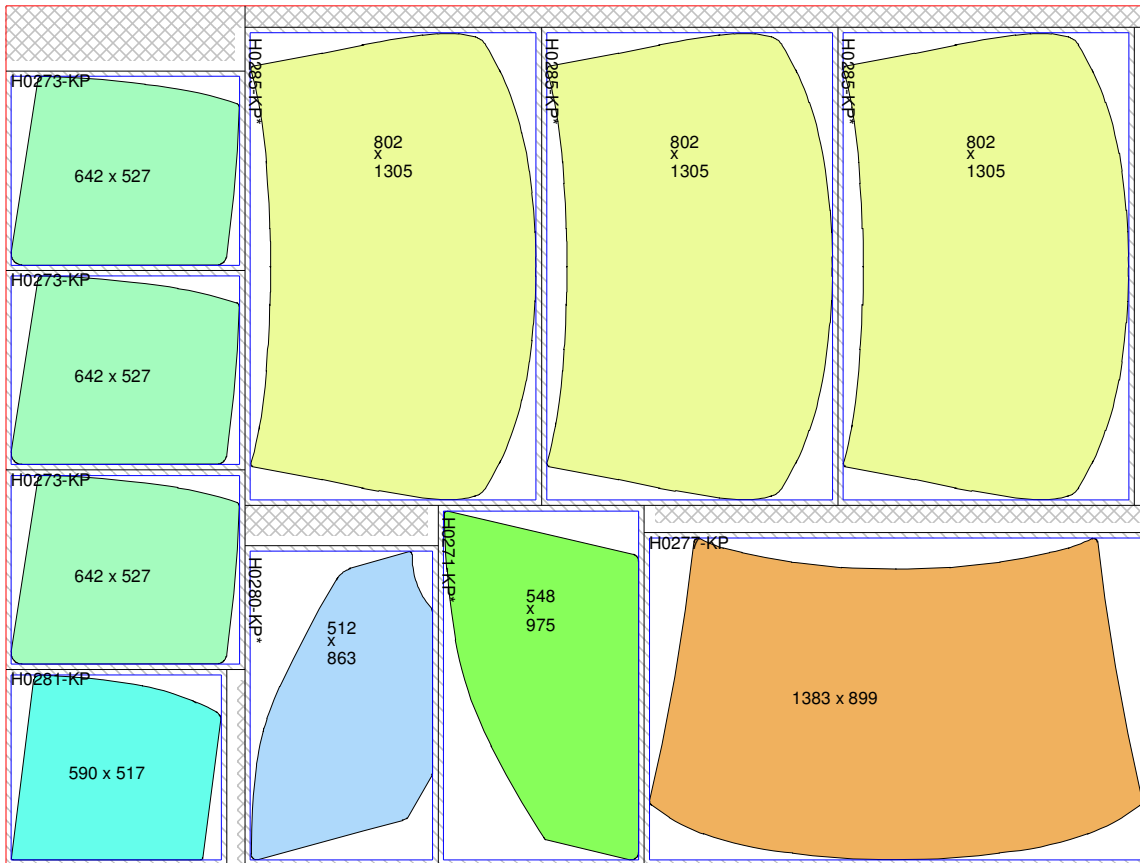
**Layout 1 of 5(Stock:Vidro 3mm Dim:3210 x 2400 Qty:1)**

**Bill Of Materials:**

Name	Length	Width	Qty	Area	Total Qty.	Prod./Re qd.	Remarks
H0277-KP	1383	899	3	3.04	3	0/10	071A 0902
H0285-KP	1305	802	2	1.79	2	0/10	130B 0902
H0273-KP	642	527	2	0.6	2	0/9	071A 0302
H0275-KP	317	407	2	0.19	2	0/10	071A 0502
Total			9	5.61	9		

### Cutting Instructions:

CutIndex	StartPt X	StartPt Y	EndPt X	EndPt Y
1	0	929	3210	929
2	1413	0	1413	929
3	2826	0	2826	929
4	3173	0	3173	929
5	2826	437	3173	437
6	2826	874	3173	874
7	0	2342	3210	2342
8	832	929	832	2342
9	0	2264	832	2264
10	1761	929	1761	2342
11	3105	929	3105	2342
12	1761	1761	3105	1761
13	3096	929	3096	1761
14	1761	2318	3105	2318
15	2433	1761	2433	2318



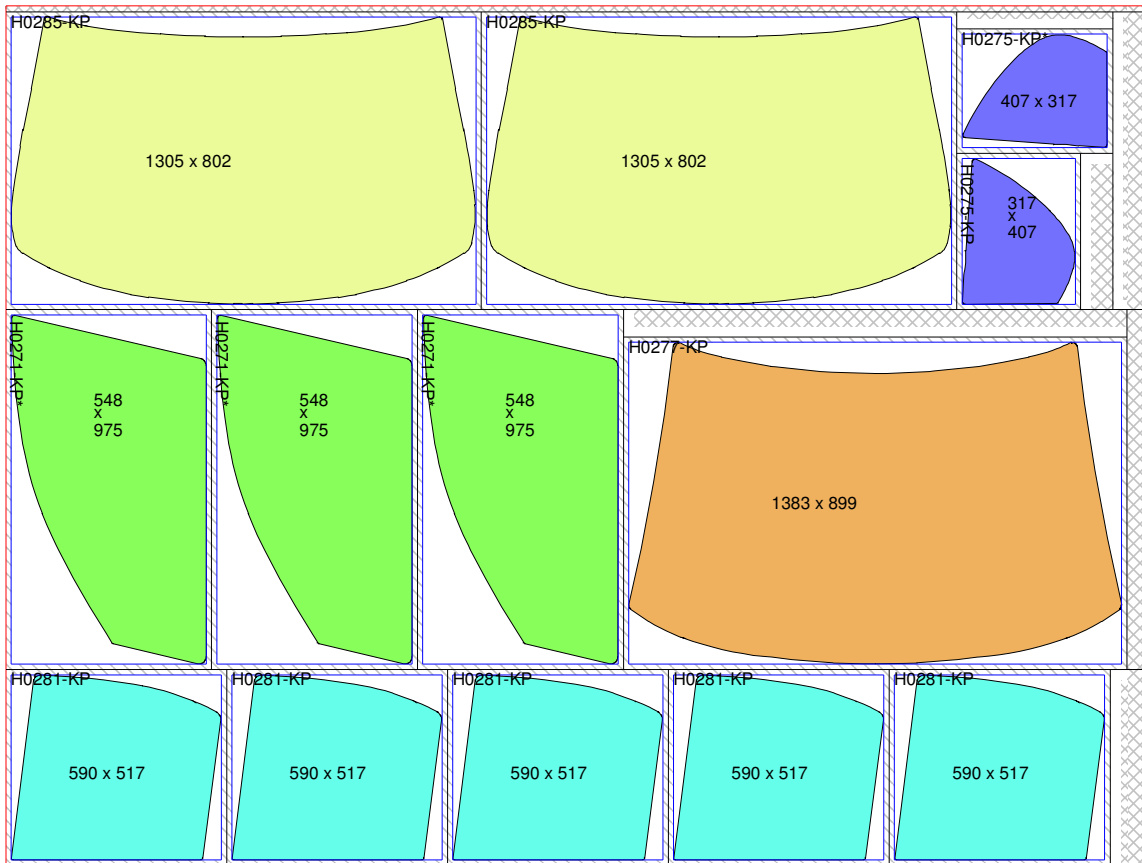
**Layout 2 of 5 (Stock: Vidro 3mm Dim: 3210 x 2400 Qty: 2)**

**Bill Of Materials:**

Name	Length	Width	Qty	Area	Total Qty.	Prod./Re qd.	Remarks
H0277-KP	1383	899	1	1.01	2	3/10	071A 0902
H0285-KP	1305	802	3	2.68	6	2/10	130B 0902
H0271-KP	975	548	1	0.4	2	0/10	071A 0102
H0273-KP	642	527	3	0.89	6	2/9	071A 0302
H0281-KP	590	517	1	0.26	2	0/10	130B 0302
H0280-KP	863	512	1	0.31	2	0/10	130B 0202
Total			10	5.56	20		

### Cutting Instructions:

CutIndex	StartPt X	StartPt Y	EndPt X	EndPt Y
1	672	0	672	2400
2	0	547	672	547
3	620	0	620	547
4	0	1104	672	1104
5	0	1661	672	1661
6	0	2218	672	2218
7	3205	0	3205	2400
8	672	1005	3205	1005
9	1214	0	1214	1005
10	672	893	1214	893
11	1792	0	1792	1005
12	1792	929	3205	929
13	672	2340	3205	2340
14	1504	1005	1504	2340
15	2336	1005	2336	2340
16	3168	1005	3168	2340



**Layout 3 of 5(Stock: Vidro 3mm Dim:3210 x 2400 Qty:1)**

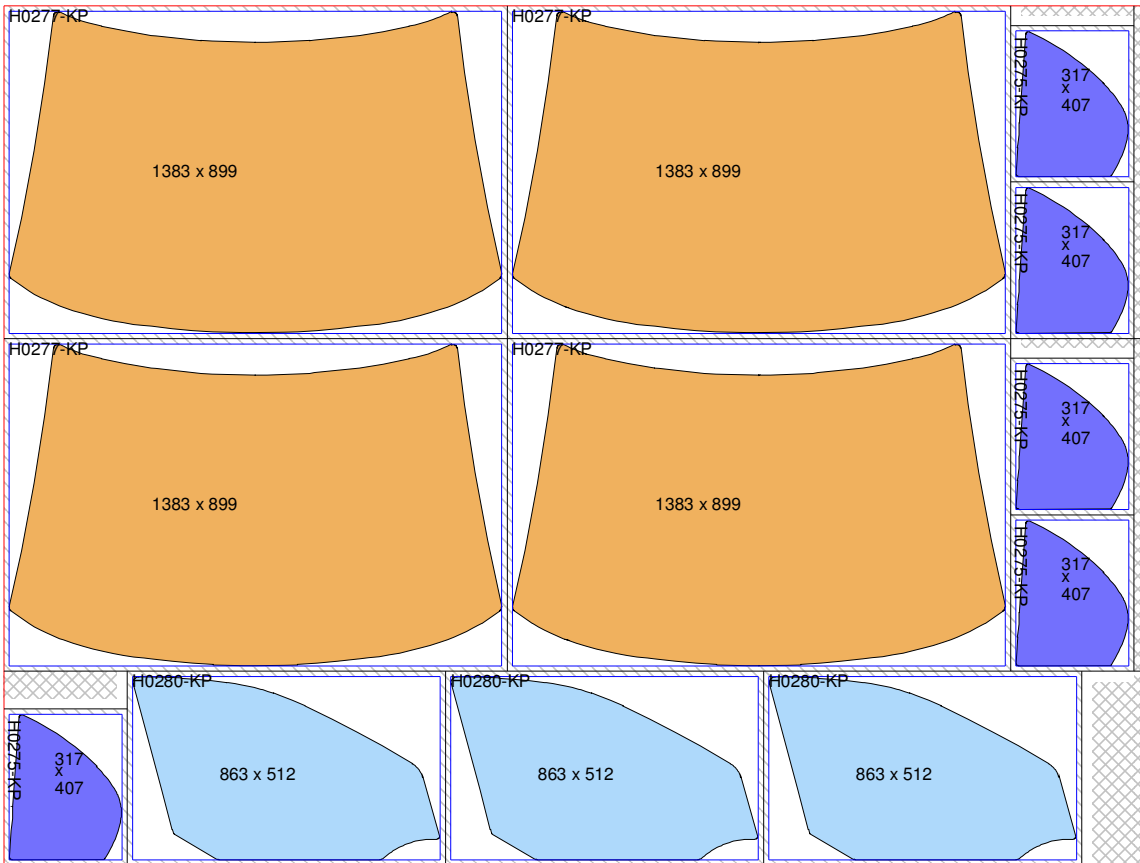
**Bill Of Materials:**

Name	Length	Width	Qty	Area	Total Qty.	Prod./Re qd.	Remarks
H0277-KP	1383	899	1	1.01	1	5/10	071A 0902
H0285-KP	1305	802	2	1.79	2*	8/10	130B 0902
H0271-KP	975	548	3	1.19	3	2/10	071A 0102
H0281-KP	590	517	5	1.3	5	2/10	130B 0302
H0275-KP	317	407	2	0.19	2	2/10	071A 0502
Total			13	5.48	13		

**Cutting Instructions:**

CutIndex	StartPt X	StartPt Y	EndPt X	EndPt Y
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<b>CutIndex</b>	<b>StartPt X</b>	<b>StartPt Y</b>	<b>EndPt X</b>	<b>EndPt Y</b>
1	0	547	3210	547
2	620	0	620	547
3	1240	0	1240	547
4	1860	0	1860	547
5	2480	0	2480	547
6	3100	0	3100	547
7	0	1552	3210	1552
8	578	547	578	1552
9	1156	547	1156	1552
10	1734	547	1734	1552
11	3147	547	3147	1552
12	1734	1476	3147	1476
13	0	2384	3210	2384
14	1335	1552	1335	2384
15	2670	1552	2670	2384
16	3107	1552	3107	2384
17	2670	1989	3107	1989
18	3017	1552	3017	1989
19	2670	2336	3107	2336



**Layout 4 of 5(Stock: Vidro 3mm Dim:3210 x 2400 Qty:1)**

**Bill Of Materials:**

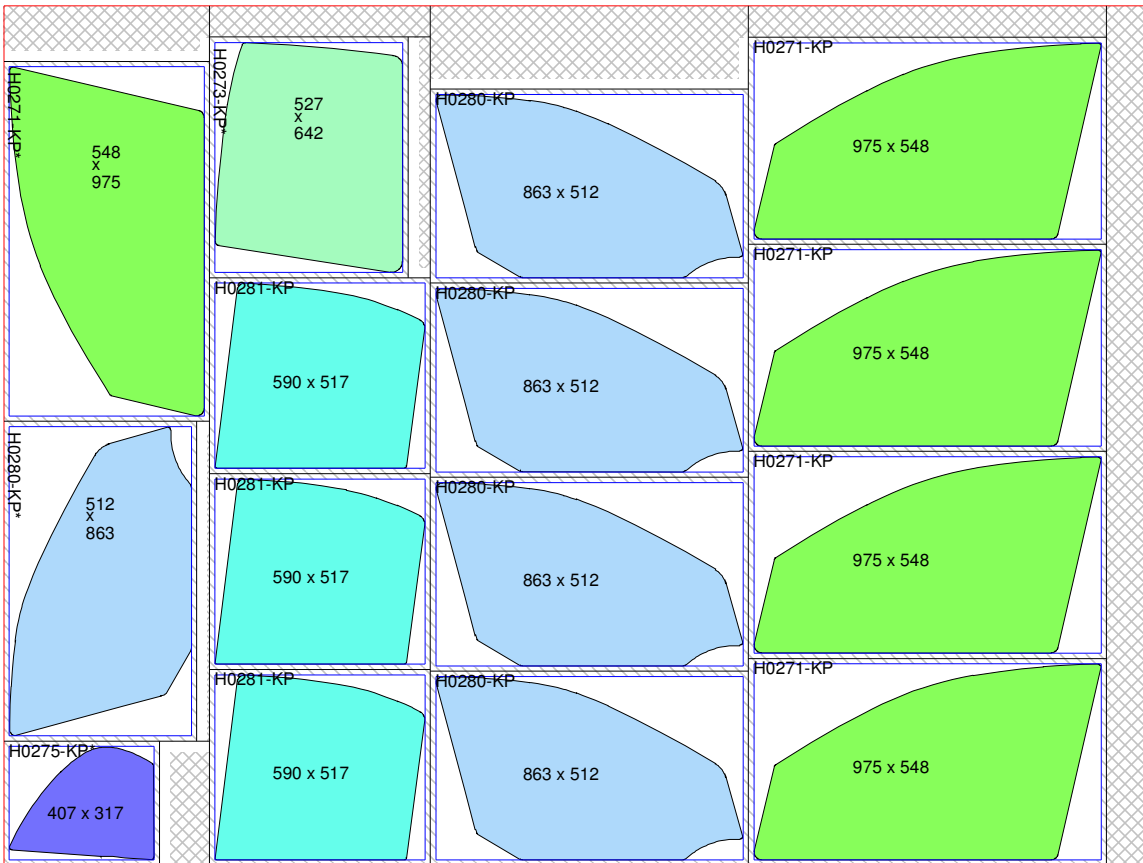
Name	Length	Width	Qty	Area	Total Qty.	Prod./Re qd.	Remarks
H0277-KP	1383	899	4	4.06	4*	6/10	071A 0902
H0280-KP	863	512	3	0.94	3	2/10	130B 0202
H0275-KP	317	407	5	0.47	5	4/10	071A 0502
Total			12	5.47	12		

**Cutting Instructions:**

CutIndex	StartPt X	StartPt Y	EndPt X	EndPt Y
1	0	542	3210	542
2	347	0	347	542
3	0	437	347	437

<b>CutIndex</b>	<b>StartPt X</b>	<b>StartPt Y</b>	<b>EndPt X</b>	<b>EndPt Y</b>
4	1240	0	1240	542
5	2133	0	2133	542
6	3026	0	3026	542
7	0	1471	3210	1471
8	1413	542	1413	1471
9	2826	542	2826	1471
10	3173	542	3173	1471
11	2826	979	3173	979
12	2826	1416	3173	1416
13	1413	1471	1413	2400
14	2826	1471	2826	2400
15	3173	1471	3173	2400
16	2826	1908	3173	1908
17	2826	2345	3173	2345





**Layout 5 of 5(Stock: Vidro 3mm Dim:3210 x 2400 Qty:1)**

**Bill Of Materials:**

Name	Length	Width	Qty	Area	Total Qty.	Prod./Re qd.	Remarks
H0271-KP	975	548	5	1.99	5*	5/10	071A 0102
H0273-KP	642	527	1	0.3	1*	8/9	071A 0302
H0281-KP	590	517	3	0.78	3*	7/10	130B 0302
H0280-KP	863	512	5	1.57	5*	5/10	130B 0202
H0275-KP	317	407	1	0.09	1*	9/10	071A 0502
Total			15	4.74	15		

**Cutting Instructions:**

CutIndex	StartPt X	StartPt Y	EndPt X	EndPt Y
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<b>CutIndex</b>	<b>StartPt X</b>	<b>StartPt Y</b>	<b>EndPt X</b>	<b>EndPt Y</b>
1	578	0	578	2400
2	0	347	578	347
3	437	0	437	347
4	0	1240	578	1240
5	542	347	542	1240
6	0	2245	578	2245
7	1198	0	1198	2400
8	578	547	1198	547
9	578	1094	1198	1094
10	578	1641	1198	1641
11	578	2313	1198	2313
12	1135	1641	1135	2313
13	2091	0	2091	2400
14	1198	542	2091	542
15	1198	1084	2091	1084
16	1198	1626	2091	1626
17	1198	2168	2091	2168
18	3096	0	3096	2400
19	2091	578	3096	578
20	2091	1156	3096	1156
21	2091	1734	3096	1734
22	2091	2312	3096	2312