

DISCLAIMER:

I have built this item and have used it.

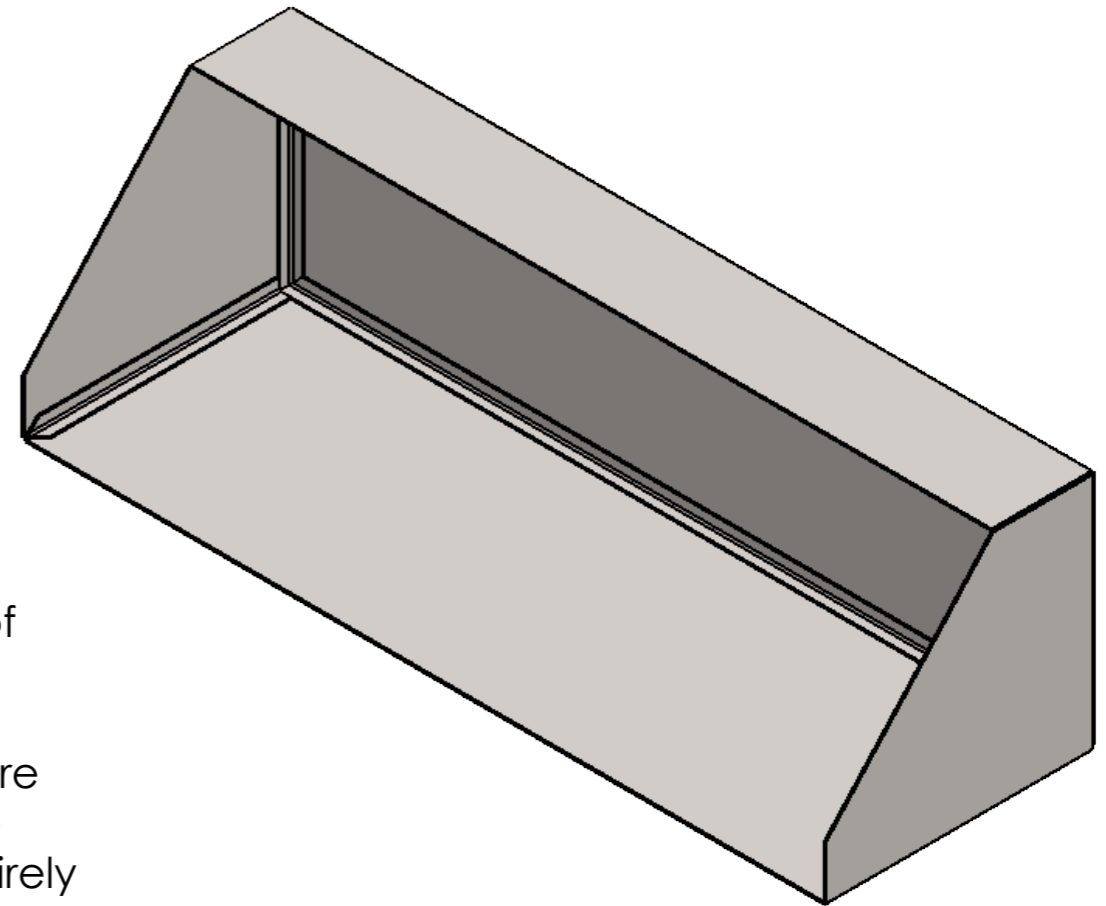
Be warned that I am not an engineer and there has been very little in the way of strength analysis done on this. It is all eyeball engineering.

I provide the plans as an example of something that has worked for me. They are provided for educational purposes only. I want to stress in the strongest possible terms that if you choose to build something from these plans then you do so entirely at your own risk.


Where the plans feature a "QA Date" this only means that I have actually built the item in the plans and completed the build on that date. It does **NOT** mean that the design passed any form of quality assurance.

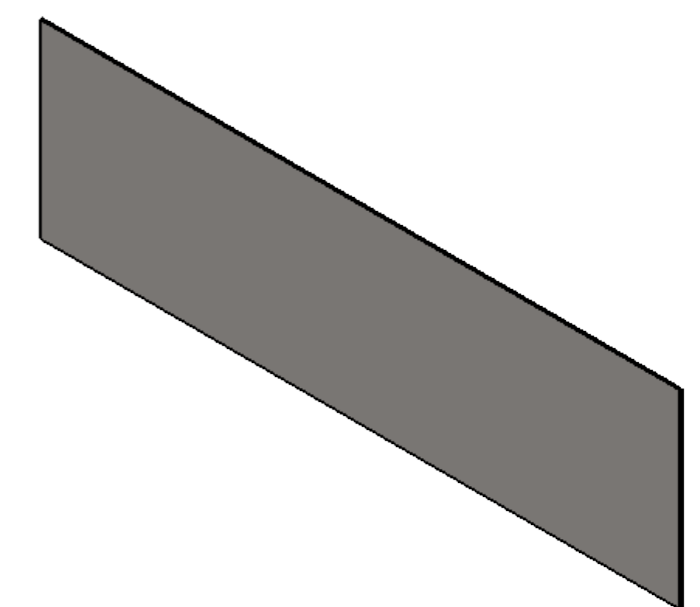
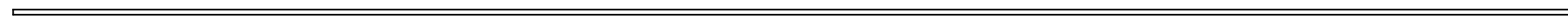
I have no control of the quality of construction nor the modifications you may make to the design. I take no responsibility for anything you choose to do with these plans.

If you do not fully understand everything above or if you do not fully agree with it then DO NOT USE THESE PLANS.

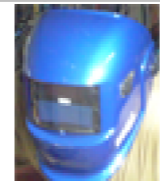


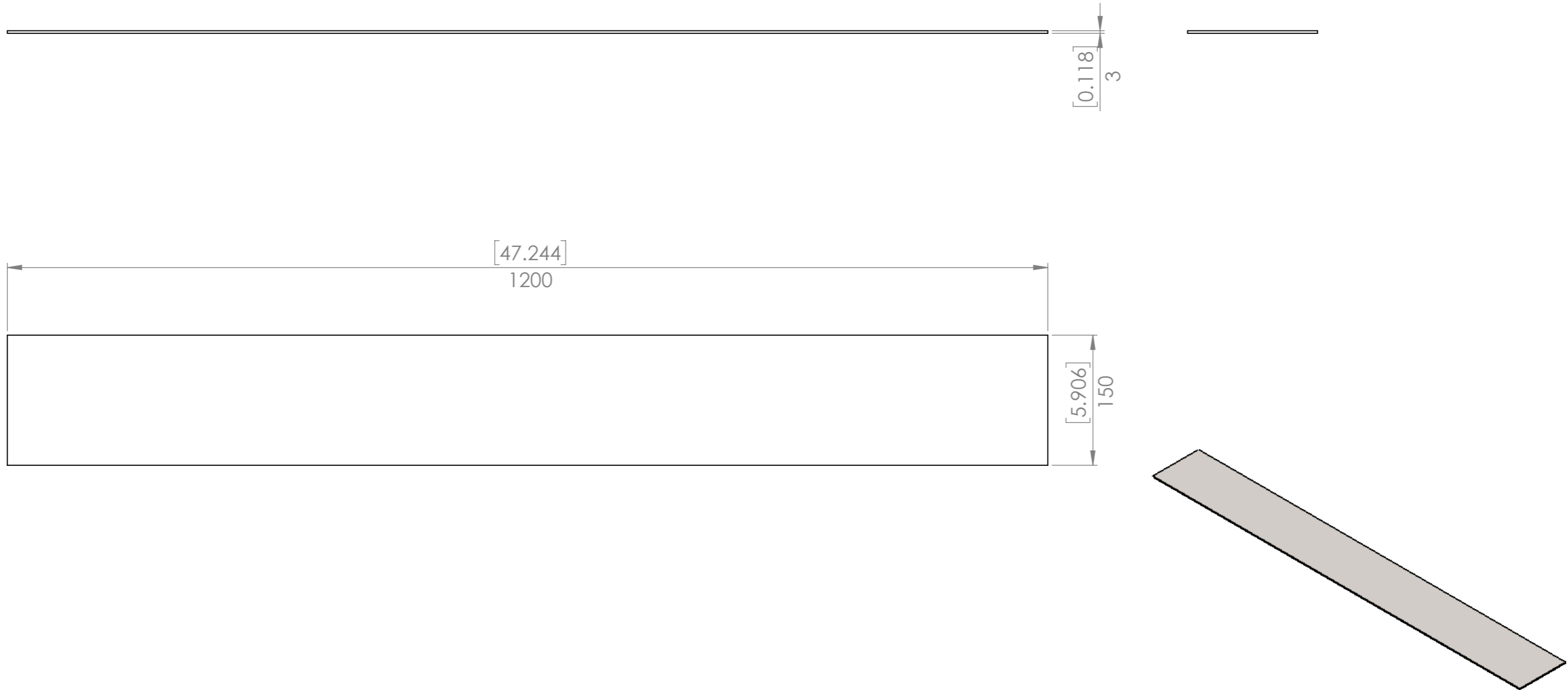
| QTY. | PART NUMBER | DESCRIPTION | MATERIAL | WEIGHT |
|------|-------------|----------------|--------------------|----------|
| 1 | p0098-001 | Bucket Back | Plain Carbon Steel | 13291.20 |
| 1 | p0098-002 | Bucket Top | Plain Carbon Steel | 4212.00 |
| 2 | p0098-003 | Bucket Side | Plain Carbon Steel | 2518.43 |
| 1 | p0098-004 | Bucket Floor | Plain Carbon Steel | 14976.00 |
| 2 | p0098-005 | Cross Brace | Plain Carbon Steel | 1046.37 |
| 2 | p0098-006 | Vertical Brace | Plain Carbon Steel | 302.04 |
| 2 | p0098-007 | Bottom Brace | Plain Carbon Steel | 325.38 |
| 2 | p0098-008 | Top Brace | Plain Carbon Steel | 105.16 |

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|---|--|--------------------|--|-----------------------------------|--|----------------------|--|---------------|--|
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS | | FINISH: Paint | | DEBUR AND BREAK SHARP EDGES | | DO NOT SCALE DRAWING | | REVISION A | |
| TOLERANCES: LINEAR: +/- 1mm ANGULAR: +/- 1degree | | | | | | Designed 2 Build | | | |
| | | | | | | | | | |
| DRAWN Merlin | | DATE 2017-03-02 | | | | TITLE: FEL Bucket | | | |
| Q.A Merlin | | DATE 2017-11-04 | | | | | | | |
|  | | | | STOCK: STOCK SIZE: | | PART NO. p0098 | | A3 | |
| | | | | MATERIAL: Assembly | | SCALE:1:8 | | SHEET 1 OF 11 | |
| | | | | WEIGHT: 41073.96 | | | | | |




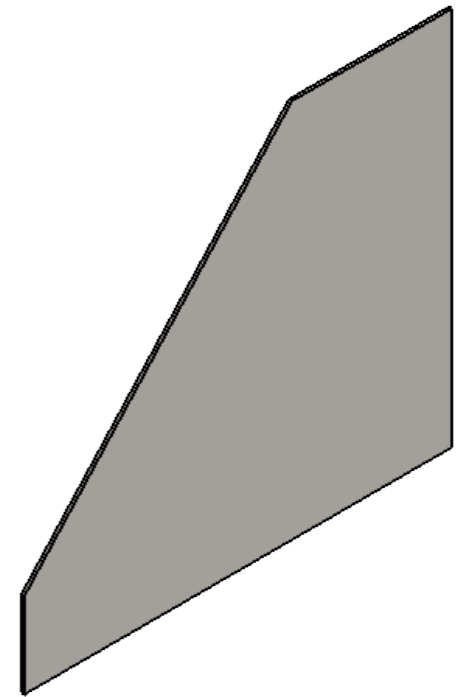
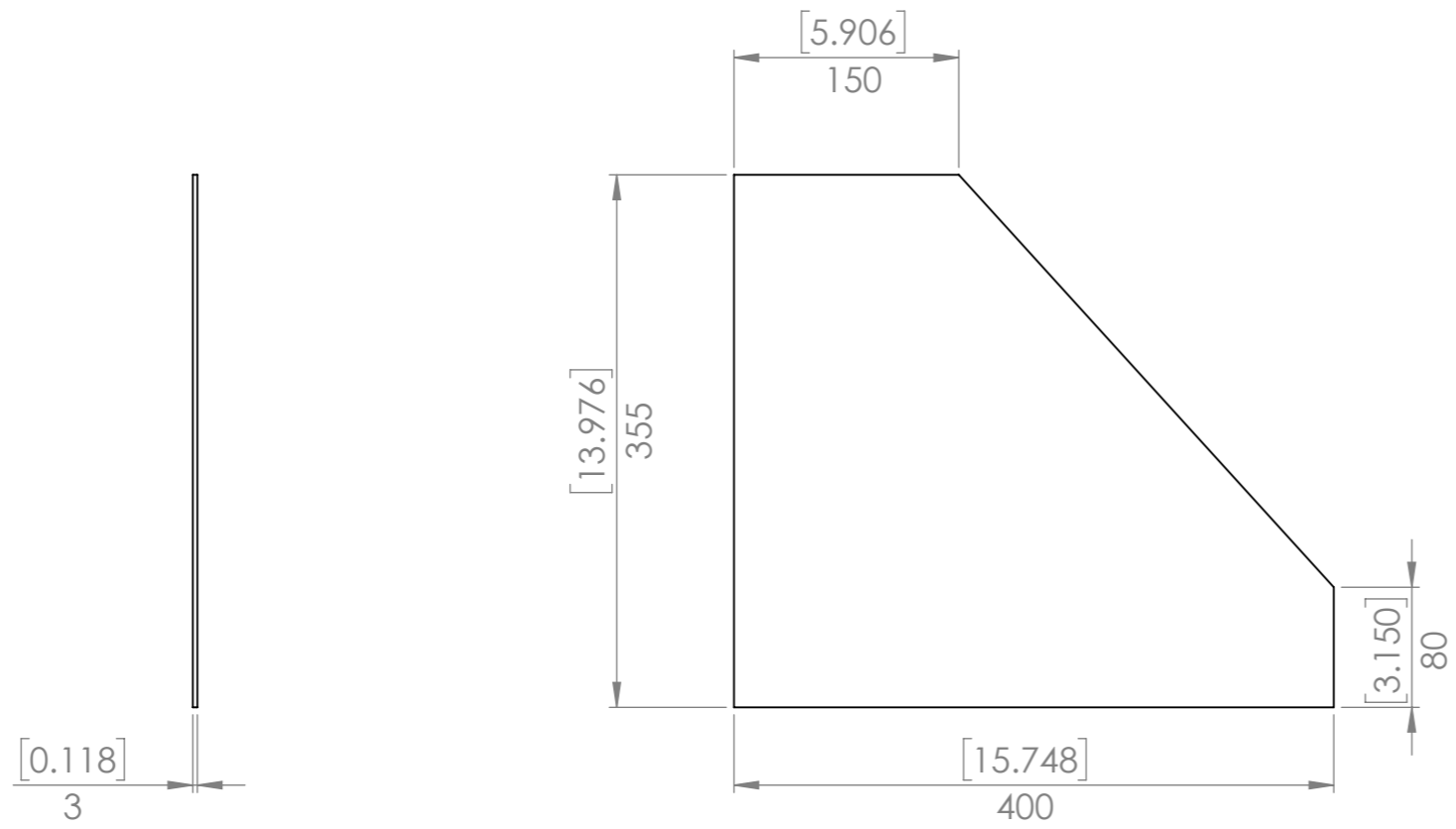
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|---|------------|-------------|--|-----------------------------------|--|---|--|---------------|--|
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS | | FINISH: | | DEBUR AND BREAK SHARP EDGES | | DO NOT SCALE DRAWING | | REVISION A | |
| TOLERANCES: LINEAR: +/- 1mm ANGULAR: +/- 1degree | | | | | | Designed 2 Build Bucket Back | | | |
| NAME | DATE | | | | | | | | |
| DRAWN Merlin | 2017-03-02 | | | | | TITLE: | | | |
| Q.A Merlin | 2017-11-04 | | | | | PART NO. | | p0098-001 | |
|  | | STOCK: | | Plate | | SCALE:1:5 | | SHEET 2 OF 11 | |
| | | STOCK SIZE: | | 3mm | | WEIGHT: 13291.20 | | A3 | |
| | | MATERIAL: | | Plain Carbon Steel | | | | | |




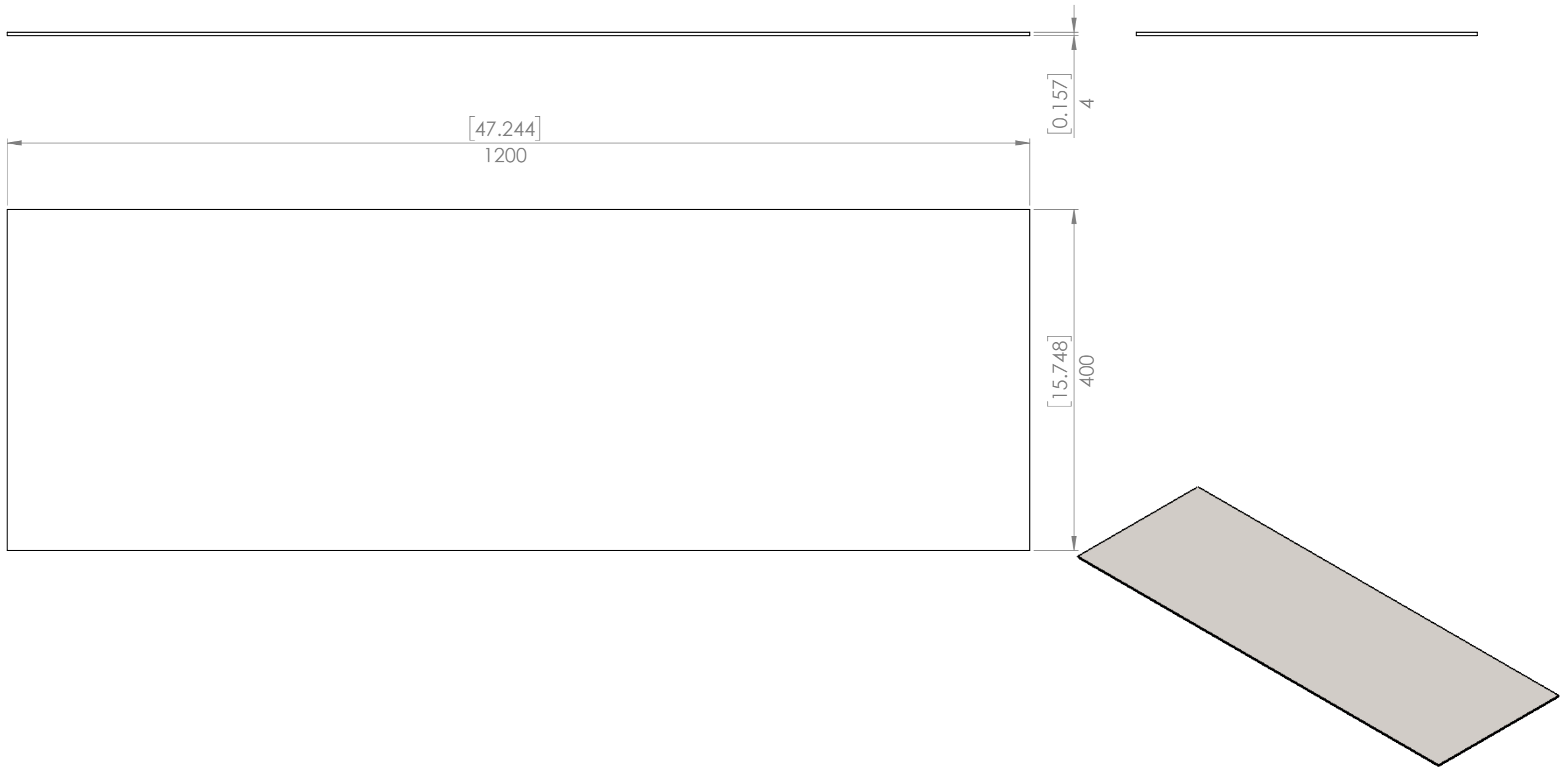
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|---|--|-----------------|--|-----------------------------------|--|--------------------------|--|------------|--|
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS | | FINISH: | | DEBUR AND BREAK SHARP EDGES | | DO NOT SCALE DRAWING | | REVISION A | |
| TOLERANCES: LINEAR: +/- 1mm ANGULAR: +/- 1degree | | | | | | Designed 2 Build | | | |
| | | | | | | | | | |
| DRAWN | | NAME | | DATE | | TITLE: Bucket Top | | | |
| | | Merlin | | 2017-03-03 | | | | | |
| Q.A | | NAME | | DATE | | PART NO. p0098-002 | | | |
| | | Merlin | | 2017-11-04 | | | | | |
|  | | STOCK: | | Plate | | SCALE:1:5 | | | |
| | | STOCK SIZE: | | 3mm | | | | | |
| | | MATERIAL: | | Plain Carbon Steel | | SHEET 3 OF 11 | | | |
| | | WEIGHT: 4212.00 | | | | | | | |




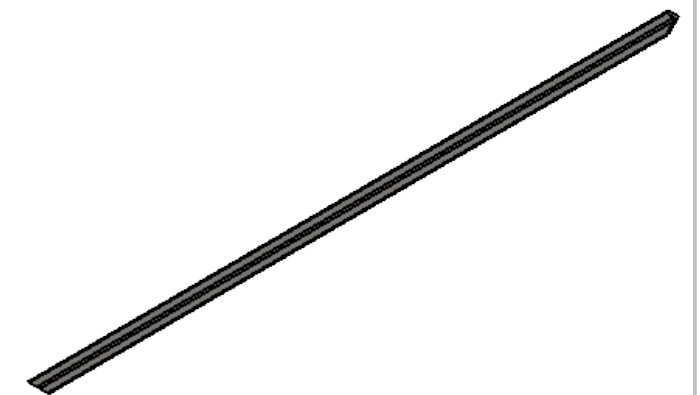
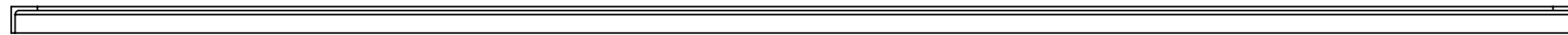
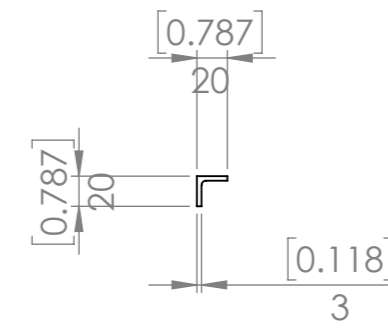
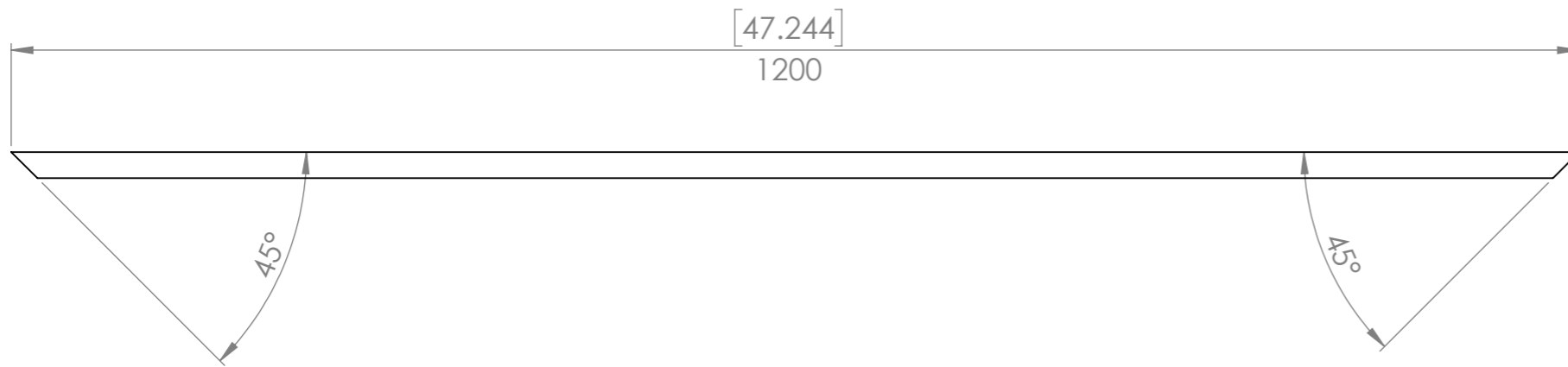
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|---|--------|-------------|------------|-----------------------------------|--|---|--|---------------|--|
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS | | FINISH: | | DEBUR AND BREAK SHARP EDGES | | DO NOT SCALE DRAWING | | REVISION A | |
| TOLERANCES: LINEAR: +/- 1mm ANGULAR: +/- 1degree | | | | | | TITLE: Designed 2 Build Bucket Side | | | |
| DRAWN | Merlin | DATE | 2017-03-02 | | | | | | |
| Q.A | Merlin | DATE | 2017-11-04 | | | | | | |
|  | | STOCK: | | Plate | | PART NO. | | p0098-003 | |
| | | STOCK SIZE: | | 3mm | | MATERIAL: | | A3 | |
| | | | | Plain Carbon Steel | | WEIGHT: 2518.43 | | SCALE:1:5 | |
| | | | | | | SHEET 4 OF 11 | | | |




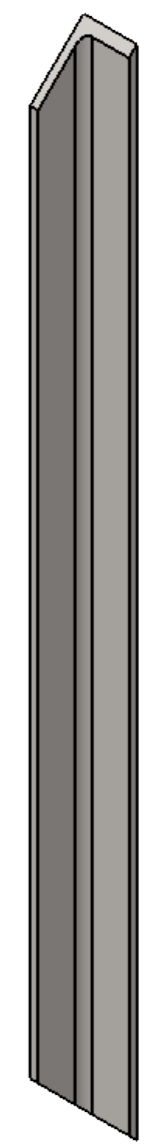
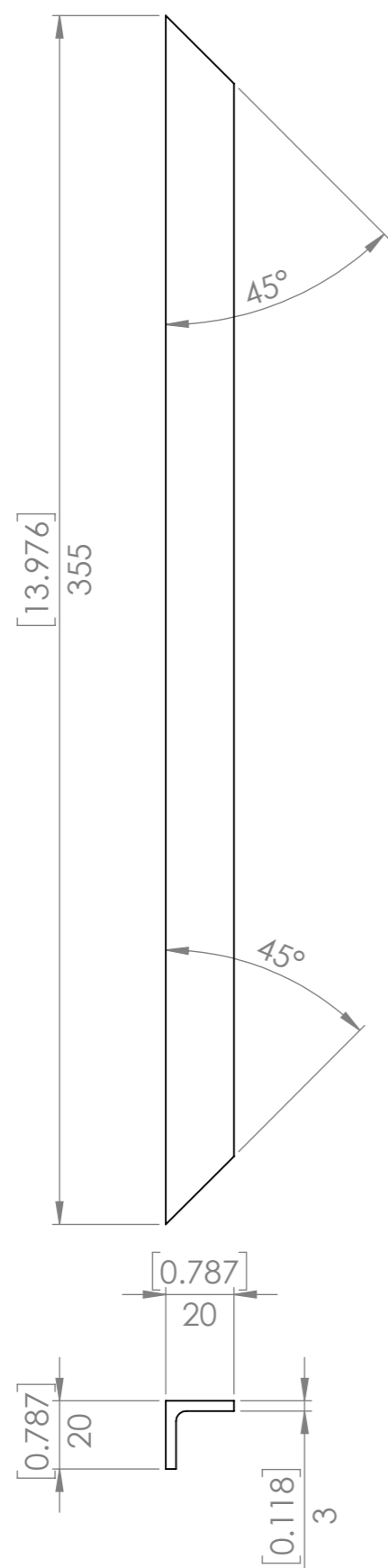
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|---|--|-------------|--|-----------------------------------|--|------------------------|--|---------------|--|
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS | | FINISH: | | DEBUR AND BREAK SHARP EDGES | | DO NOT SCALE DRAWING | | REVISION A | |
| TOLERANCES: LINEAR: +/- 1mm ANGULAR: +/- 1degree | | | | | | Designed 2 Build | | | |
| | | | | | | | | | |
| DRAWN | | NAME | | DATE | | TITLE: Bucket Floor | | | |
| | | Merlin | | 2017-03-02 | | | | | |
| Q.A | | NAME | | DATE | | PART NO. p0098-004 | | | |
| | | Merlin | | 2017-11-04 | | | | | |
|  | | STOCK: | | Plate | | SCALE:1:5 | | | |
| | | STOCK SIZE: | | 4mm | | | | | |
| | | MATERIAL: | | Plain Carbon Steel | | WEIGHT: 14976.00 | | SHEET 5 OF 11 | |
| | | | | | | A3 | | | |




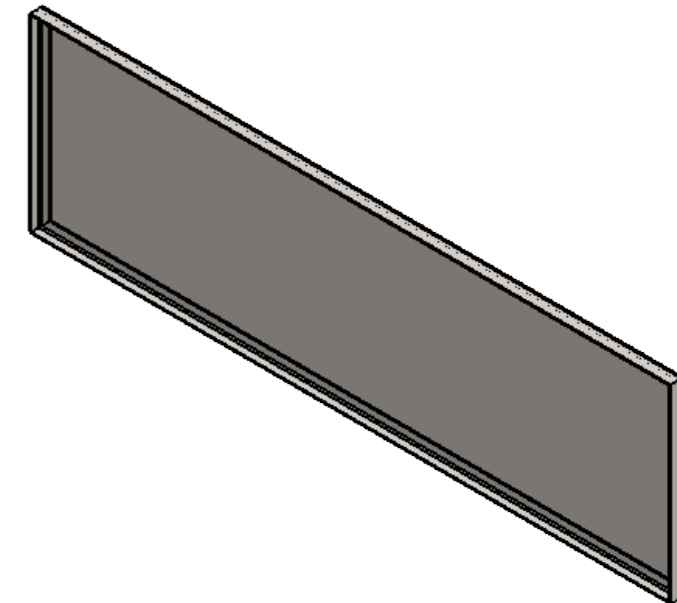
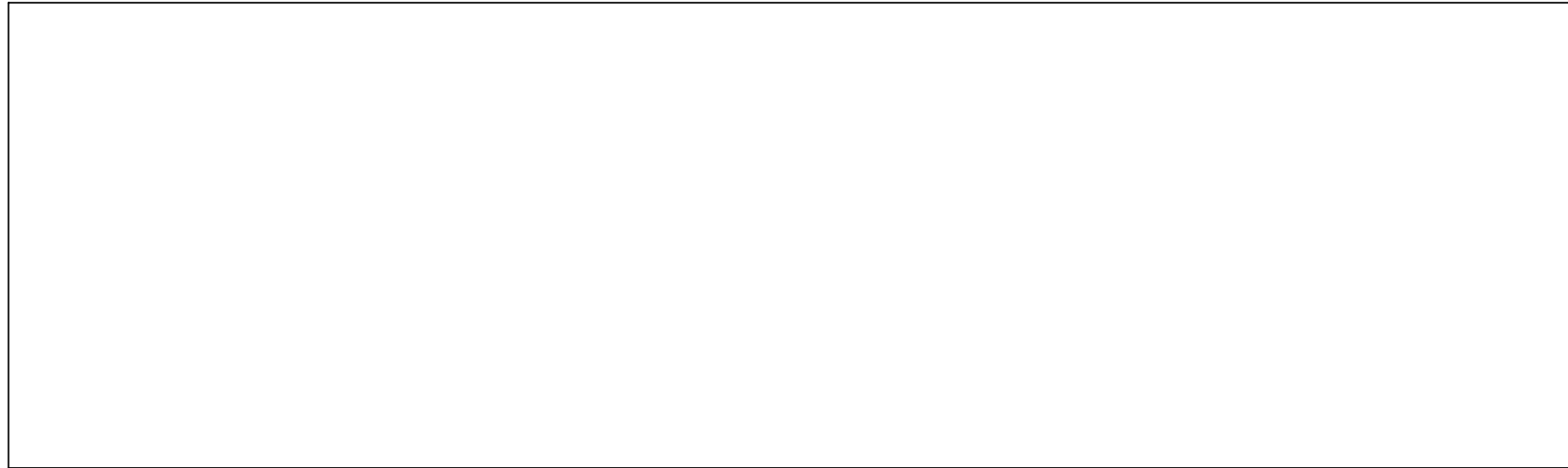
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| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS | | FINISH: | | DEBUR AND BREAK SHARP EDGES | | DO NOT SCALE DRAWING | | REVISION A | |
| TOLERANCES: LINEAR: +/- 1mm ANGULAR: +/- 1degree | | | | | | TITLE: Cross Brace | | | |
| | NAME | DATE | | | | | | | |
| DRAWN | Merlin | 2017-04-21 | | | | | | | |
| | NAME | DATE | | | | | | | |
| Q.A | Merlin | 2017-11-04 | | | | | | | |
|  | | STOCK: | | Angle | | PART NO. | | p0098-005 | |
| | | STOCK SIZE: | | 50x50x3mm | | MATERIAL: | | Plain Carbon Steel | |
| | | WEIGHT: | | 1046.37 | | SCALE: | | 1:5 | |
| | | | | | | | | A3 | |




2 required

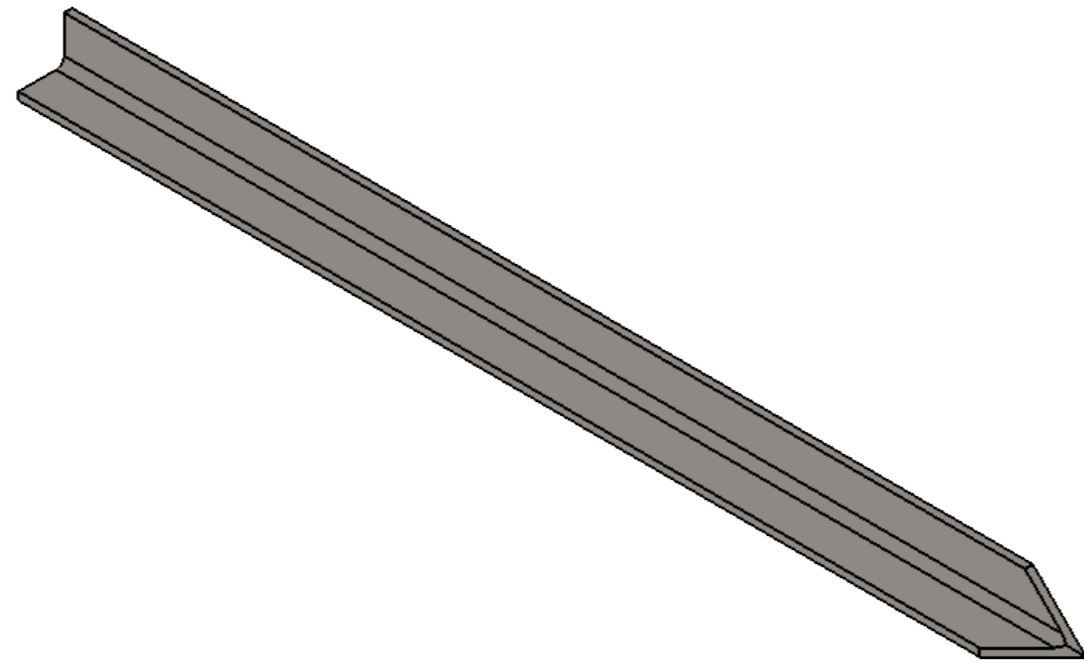
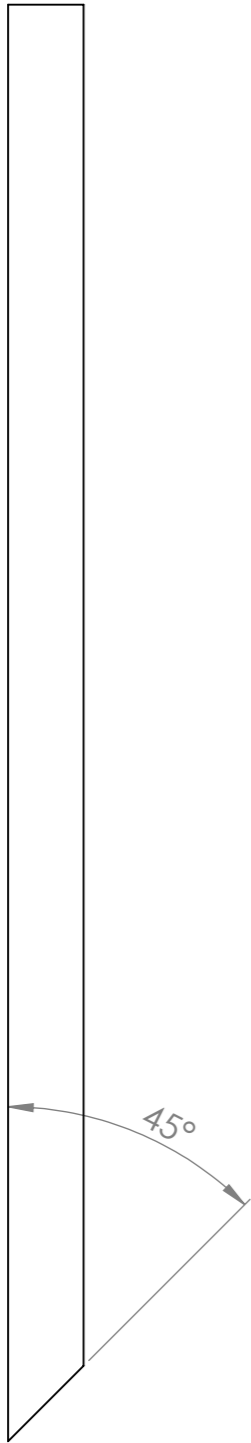
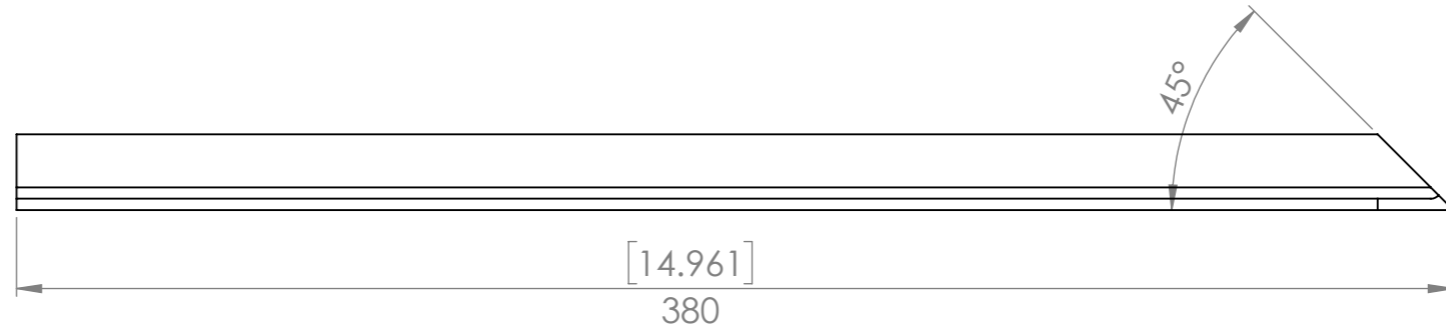
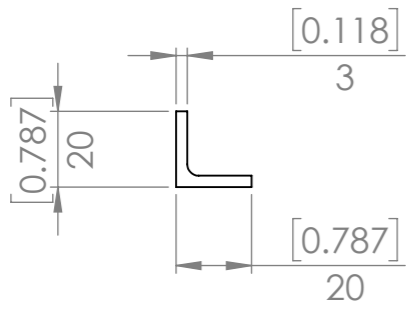
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| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS | | FINISH: | | DEBUR AND BREAK SHARP EDGES | | DO NOT SCALE DRAWING | | REVISION A | |
| TOLERANCES: LINEAR: +/- 1mm ANGULAR: +/- 1degree | | | | | | Designed 2 Build Vertical Brace | | | |
| DRAWN | Merlin | DATE | 2017-04-21 | | | | | | |
| Q.A | Merlin | DATE | 2017-11-04 | | | PART NO. | | p0098-006 | |
|  | | STOCK: | | Angle | | SCALE:1:2 | | SHEET 7 OF 11 | |
| | | STOCK SIZE: | | 50x50x3mm | | WEIGHT: 302.04 | | A3 | |
| | | MATERIAL: | | Plain Carbon Steel | | | | | |



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|---|--|---------------------|--|--|--|-------------------------|--|---------------|--|
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS | | FINISH: Bare | | DEBUR AND BREAK SHARP EDGES | | DO NOT SCALE DRAWING | | REVISION A | |
| TOLERANCES: LINEAR: +/- 1mm ANGULAR: +/- 1degree | | | | | | Designed 2 Build | | | |
| DRAWN Merlin | | DATE 2017-03-02 | | | | TITLE: Back Bulkhead | | | |
| Q.A Merlin | | DATE 2017-11-04 | | | | PART NO. p0097-A01 | | A3 | |
|  | | | | STOCK: STOCK SIZE: MATERIAL: Assembly | | WEIGHT: 15988.03 | | SCALE:1:5 | |
| | | | | | | SHEET 8 OF 11 | | | |

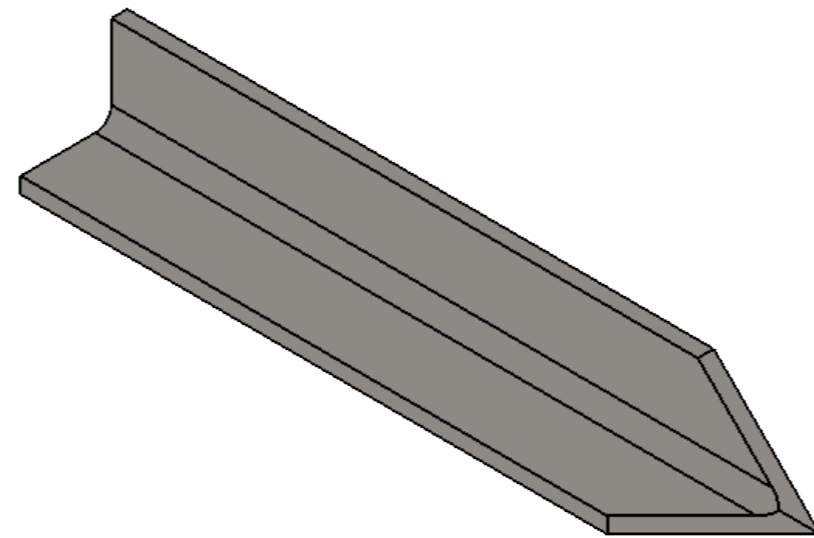
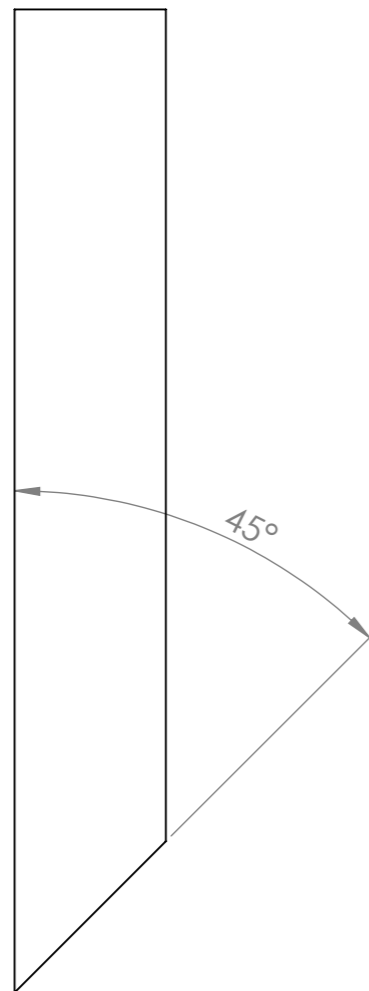
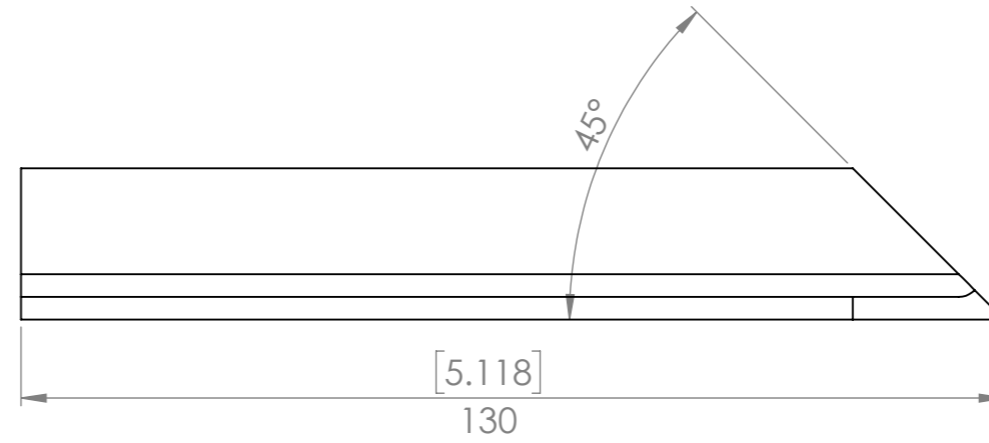
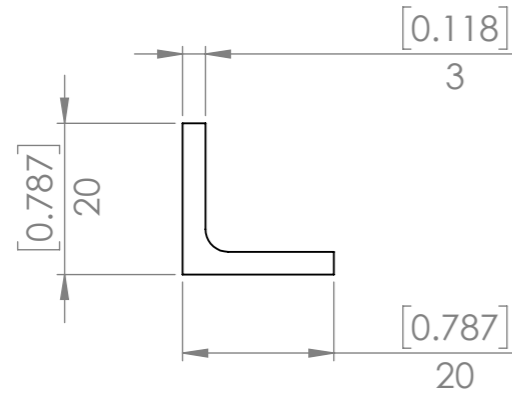
| QTY. | PART NUMBER | DESCRIPTION | MATERIAL | WEIGHT |
|------|-------------|----------------|--------------------|----------|
| 1 | p0098-001 | Bucket Back | Plain Carbon Steel | 13291.20 |
| 2 | p0098-005 | Cross Brace | Plain Carbon Steel | 1046.37 |
| 2 | p0098-006 | Vertical Brace | Plain Carbon Steel | 302.04 |



When I built the bucket I decided not to point the ends and I cut the angle square and welded the end to the sheet. See the video for details.


2 required

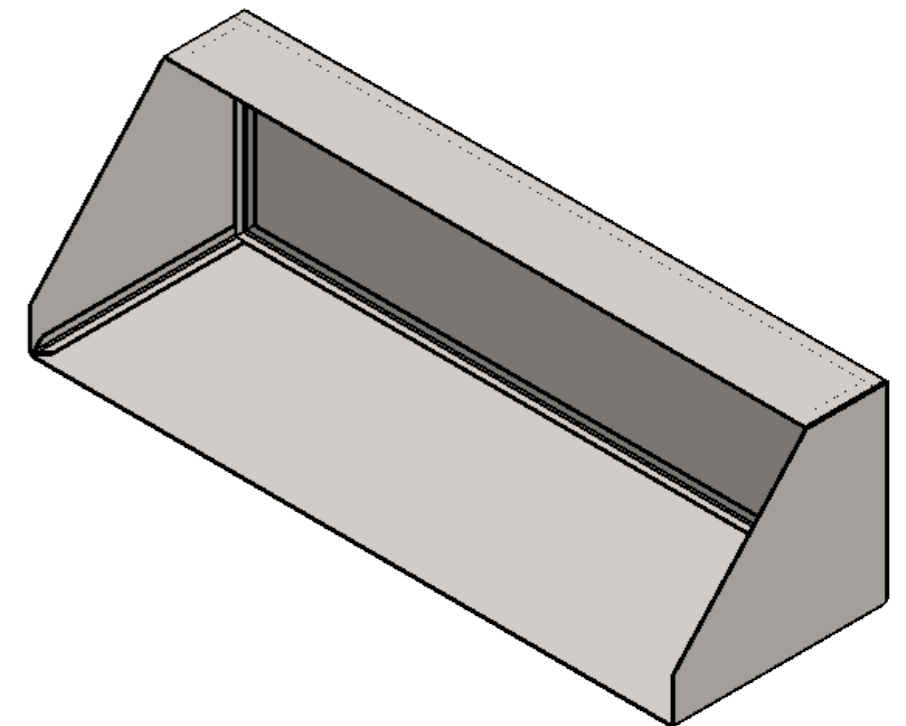
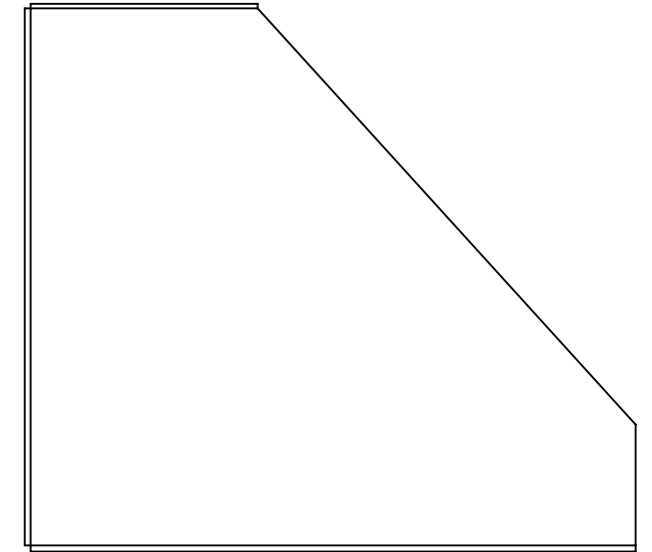
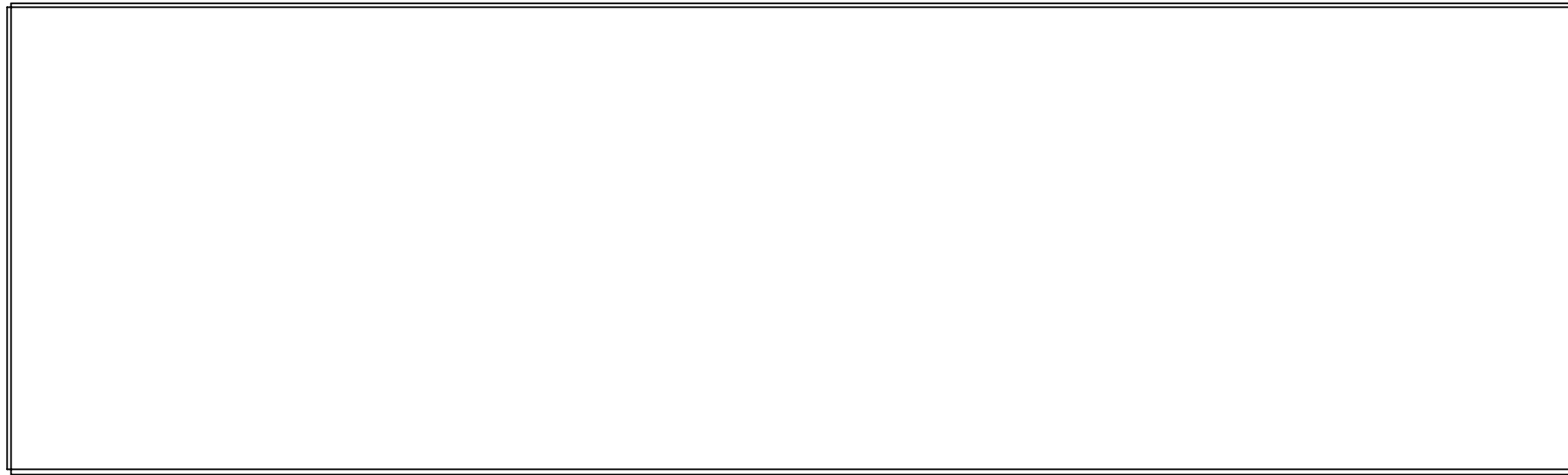
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|---|--|-------------|--|-----------------------------------|--|--|--|---------------|--|
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS | | FINISH: | | DEBUR AND BREAK SHARP EDGES | | DO NOT SCALE DRAWING | | REVISION A | |
| TOLERANCES: LINEAR: +/- 1mm ANGULAR: +/- 1degree | | | | | | Designed 2 Build Bottom Brace | | | |
| | | | | | | | | | |
| DRAWN | | NAME | | DATE | | TITLE: | | | |
| | | Merlin | | 2017-04-21 | | PART NO. p0098-007 | | | |
| Q.A | | Merlin | | 2017-11-04 | | | | | |
|  | | STOCK: | | Angle | | SCALE: 1:2 | | | |
| | | STOCK SIZE: | | 50x50x3mm | | | | | |
| | | MATERIAL: | | Plain Carbon Steel | | WEIGHT: 325.38 | | SHEET 9 OF 11 | |



When I built the bucket I decided not to point the ends and I cut the angle square and welded the end to the sheet. See the video for details.


2 required

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|---|----------------|--------------------|--|-----------------------------------|--|---|--|----------------|--|
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS | | FINISH: | | DEBUR AND BREAK SHARP EDGES | | DO NOT SCALE DRAWING | | REVISION A | |
| TOLERANCES: LINEAR: +/- 1mm ANGULAR: +/- 1degree | | | | | | TITLE: Designed 2 Build Top Brace | | | |
| DRAWN | NAME Merlin | DATE 2017-04-21 | | | | | | | |
| Q.A | NAME Merlin | DATE 2017-11-04 | | | | | | | |
|  | | STOCK: | | Angle | | PART NO. | | p0098-008 | |
| | | STOCK SIZE: | | 50x50x3mm | | A3 | | | |
| | | MATERIAL: | | Plain Carbon Steel | | SCALE:1:1 | | SHEET 10 OF 11 | |
| | | WEIGHT: 105.16 | | | | | | | |



1 required

| QTY. | PART NUMBER | DESCRIPTION | MATERIAL | WEIGHT |
|------|-------------|---------------|--------------------|----------|
| 1 | p0098-002 | Bucket Top | Plain Carbon Steel | 4212.00 |
| 2 | p0098-003 | Bucket Side | Plain Carbon Steel | 2518.43 |
| 1 | p0098-004 | Bucket Floor | Plain Carbon Steel | 14976.00 |
| 2 | p0098-007 | Bottom Brace | Plain Carbon Steel | 325.38 |
| 2 | p0098-008 | Top Brace | Plain Carbon Steel | 105.16 |
| 1 | p0097-A01 | Back Bulkhead | Assembly | 15988.03 |

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|---|----------------|-----------------------|-----------------------------------|---|---------------|
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS | | FINISH: Paint | DEBUR AND BREAK SHARP EDGES | DO NOT SCALE DRAWING | REVISION A |
| TOLERANCES: LINEAR: +/- 1mm ANGULAR: +/- 1degree | | | | Designed 2 Build | |
| DRAWN | NAME Merlin | DATE 2017-03-02 | | FEL Bucket | |
| Q.A | Merlin | 2017-11-04 | | | |
|  | | STOCK: | | PART NO. p0098 A3 | |
| | | STOCK SIZE: | | | |
| | | MATERIAL: Assembly | | SCALE:1:5 | |
| | | WEIGHT: 41073.96 | | SHEET 11 OF 11 | |