
MILFORD ASTOR

A DIVISION OF  ALDUS

PAD CATALOGUE



MILFORD ASTOR

A DIVISION OF  **ALDUS**

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ORDERING CODES

Each Milford Astor printing pad has a unique identification number.
Using this number you can figure out the ordering code.

For instance if you wanted to order
Pad number 12 in a 4 shore hardness,
your ordering code would be **MAPP1204**
the same pad in an 8 shore hardness would be **MAPP1208**

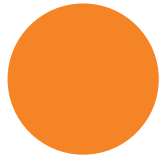
Each code is listed in the catalogue without the shore hardness
(IE MAPP12XX).

Pads are available in hardnesses of 0 shore to 16 shore.
0 Shore is the softest pad, 16 shore the hardest.

Pad Measurements are taken from the wooden base.

**Our customer service and sales representatives are always
available to help you if required.**

Milford Astor Pad Range



Round Pads



Square Pads



Rectangular Pads



Other Pads



Cavity (Hollow) Pads

All pads are moulded on to wooden bases and include a central M6 thread for easy attachment.

Aluminium bases are available if required - please ask your representative for a quote.

Pads

Pad life ranges from 10,000 cycles to 100,000 cycles depending on the application. The average lifespan is approximately 50,000. Print surfaces that are flat and free of ridges or protrusions will have a longer life than surfaces that contain these factors.

Extended operation and contact with solvents that are mixed in to ink cause silicone oil that is present in the pads to become depleted. As the pad dries over time, its ability to pick up and release an image is severely reduced. Proper maintenance of pads can significantly extend their life. One easy way is to use silicone oil (order code: MOASILICONEOIL). After each shift, remove the pad from the machine and rub a small amount of oil onto the pad's surface, then store the pad on a shelf positioned on its base. This will allow the newly applied oil to penetrate the pad body.

ACTIVATING YOUR PAD

When using a new pad for the first time, it may take a while to 'run in' and give the print quality and consistency needed.

This problem is usually caused by a build up of excess silicone oil near the printing surface of the pad and will lead to an uneven transfer of ink.

Wiping the surface of the pads with a standard thinner used with ink is a common way of activating the pad and of course helps to clear away some of that silicone from the surface, but if a pad is rubbed too hard or if the thinners evaporate leaving the cloth dry while rubbing it can cause permanent damage to the pad surface, meaning poor print quality and low pad life.

An alternative way to activate the printing pad is to wipe the thinner on to a sheet of plain paper leaving the surface of the paper coated with the thinner.

Next place the paper directly in the print position and start the machine cycle allowing the pad to print directly on to the thinner coated paper, the thinner will now be carried back on the surface of the pad and as it is compressed during its next ink pick up. It will begin to activate directly at the most important area of the pad, the area where our image is going to be picked up / transferred from.

Make around 20 print cycles and then swap the thinner coated paper for a dry sheet of paper and continue to cycle the machine for another 10 - 20 prints until the pad is dry.

The pad is now activated and ready to use without the damage that can be caused by the conventional rubbing of printing pads.

Use Long Life Silicone Pad Oil to rejuvenate and store your pads.

Order Code: MOASILICONEOIL

PAD MAINTENANCE

Although there are no hard and fast guidelines regarding pad life a number of steps can be taken to extend the life of your pads:

Use a strong solvent only for the initial removal of the excess silicone oils on the surface.

Use adhesive tape or the cleaning cycle on the printing machine if the pad must be cleaned during or prior to production. (For heavy soiling a mild solvent such as alcohol can be used sparingly).

Always use tape to remove debris and dried ink before starting a production run.

Use as little pressure as possible on the pad during production runs.

Never print onto an empty nesting fixture, sharp edges can cut your pad.

Ensure that the substrate is free of debris, particularly sharp particles, before printing.

With wood backed pads (those without a threaded insert), don't let the wood screws penetrate into the rubber.

Whenever possible, avoid printing near sharp substrate edges.

Use as large a pad as is reasonable for the job at hand.

Never store a pad on top of another one. Before storing apply a light coating of Long Life Oil (MOASILICONEOIL)

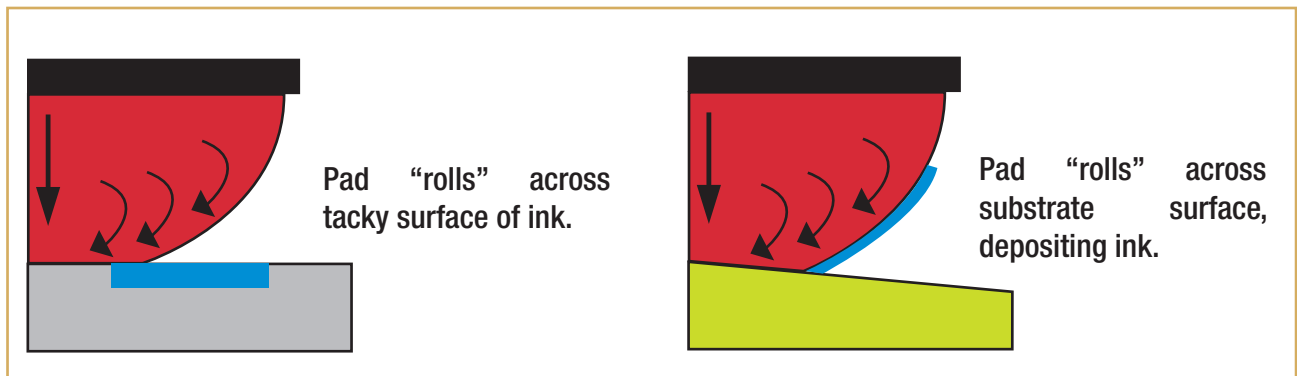
Handle and store the pads very carefully. Keep them away from sunlight in a storage cabinet at room temperature.

Certain inks have aggressive solvents that will be absorbed by the pad during printing. This solvent absorption will cause the image area to "swell" on the pad, to the point where it will eventually affect the print quality. At this point, stop the machine and replace this swollen pad. This isn't a permanent condition, and if the pad is allowed to stand unused, the solvents that have penetrated the rubber surface will evaporate and the swelling will go down to the original size.

Shape and Size

Shape is the most important variable in selecting a pad.

Choose a pad shape that will achieve a “rolling” action when the ink is both picked up from the cliché and deposited on the substrate. The contact angle should be 30 - 70°. Without this rolling action and contact angle, air can become trapped between the pad and either the cliché or the substrate, resulting in print distortion and pin-holes due to irregular ink pickup or deposition.

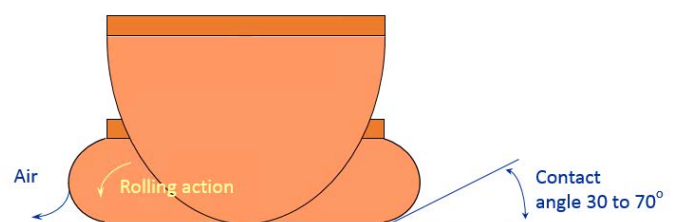


The shape of the pad largely determines how well the pad will achieve this rolling action. Milford Astor keeps hundreds of pads in stock. They are based on three basic shapes: **ROUND, RECTANGULAR & BAR**

Round pads distort evenly while square or rectangular pads may have higher distortion towards the corners, especially if your pad is only slightly larger than the image being printed. For this reason another important variable to consider is pad size relative to image size.

In screen printing, the larger the screen is in relation to the image size, the less distortion will occur. The same applies to pad printing. The larger the pad, the less the image is likely to distort. Often, the distance between the cliché and the body of the machine (sometimes called the “throat” of the machine) will determine the maximum pad size.

Generally, most pad-printing operators have a favourite shape that covers 90% of their applications. But standard shapes are available for all sorts of unusual applications. An example is a standard shape that will print onto oven-control knobs. These special pads have holes in them to accommodate the raised portion of the knobs and allow the print to be applied to the bevelled edge.



For unusual imaging, a custom pad may be used that combines two different profiles. These “combination” pads can be expensive and they are prone to print distortions unless they are very carefully designed. A preferable solution is to use two separate pads and mount them close together on a single machine. Another advantage of using two pads is that if one is damaged, the cost of replacing it is much less.

Use the following guidelines when choosing a pad shape for a particular job.

1. First, try your standard pads that you think would do the job for this particular part. Do a test print to verify if the proposed print area is imaged accurately.
2. If the chosen pad shape provides a satisfactory print over just a part of the area, look for similar pad shapes that extends the profile in a way that will cover the entire image. Distortion at the image edges is almost always caused by undersized pads.
3. If the obvious pads fail, try ones that may appear to be unsuitable. Perhaps the pad has a sharper angle than would seem to be appropriate, or is clearly too large for the image. This may still solve the problem.
4. Irregular ink pickup during the test print usually means air is being trapped between the pad surface and the cliché. Watch carefully as the pad is being imaged to be sure that a rolling action is occurring and the contact angle is between 30 and 70°.
5. Whenever possible, ensure that the point or apex of the pad does not come into contact with the image area of the cliché. This tends to thin the ink at that point, causing inconsistent ink deposit.
6. If the pad is “overstressed” (that is, too small for the image) or the image is too close to the edge of the pad, distortion is likely to occur. Always use as little pressure as possible to pick up and print the image. If the machine is running too fast, excessive pad pressure can cause distortion as well as poor ink transfer.

If experimentation doesn't reduce the print distortion to an acceptable level, and a custom pad is out of the question, the last resort is to distort the image on the cliché to compensate. This is done by printing a grid onto the substrate and measuring the distortion of the grid to guide in the alterations that are to be made to the original artwork. This will shorten the time it takes to test print, but it won't eliminate the trial-and-error altogether. This method also leads to ongoing problems since positioning of the part and the pad (relative to the image of the cliché) must be absolutely dead on each time the job is set up to avoid distortion.

Remember if there are quality problems with the print image, Milford Astor has expertise that could assist you.





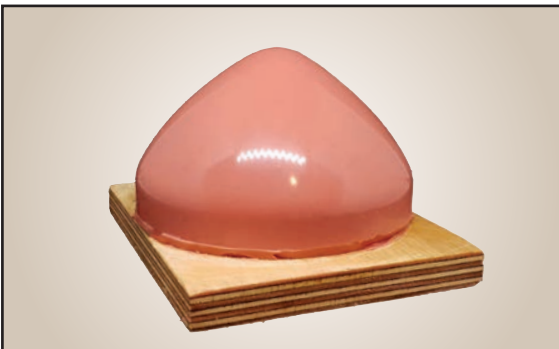
Dimensions: Ø 55mm • H 50mm
Print Area: Ø 25mm
Order Code: MAPP01XX

Pad #
01



Dimensions: Ø 77mm • H 62mm
Print Area: Ø 50mm
Order Code: MAPP02XX

Pad #
02



Dimensions: 88 x 68mm • H 50mm
Print Area: Ø 62mm
Order Code: MAPP03XX

Pad #
03



Dimensions: Ø 55mm • H 45mm
Print Area: Ø 25mm
Order Code: MAPP04XX

Pad #
04



Dimensions: Ø 56mm • H 55mm
Print Area: Ø 35mm
Order Code: MAPP05XX

Pad #
05



Dimensions: Ø 57mm • H 50mm
Print Area: Ø 40mm
Order Code: MAPP06XX

Pad #
06



Dimensions: Ø 94mm • H 70mm
Print Area: Ø 70mm
Order Code: MAPP08XX

Pad #
08



Dimensions: Ø 48mm • H 45mm
Print Area: Ø 30mm
Order Code: MAPP09XX

Pad #
09



Dimensions: Ø 52mm • H 40mm
Print Area: Ø 28mm
Order Code: MAPP10XX

Pad #
10



Dimensions: Ø 60mm • H 45mm
Print Area: Ø 32mm
Order Code: MAPP11XX

Pad #
11



Dimensions: Ø 72mm • H 68mm
Print Area: Ø 47mm
Order Code: MAPP12XX

Pad #
12



Dimensions: Ø 90mm • H 63mm
Print Area: Ø 60mm
Order Code: MAPP13XX

Pad #
13



Dimensions: Ø 82mm • H 68mm
Print Area: Ø 57mm
Order Code: MAPP14XX

Pad #
14



Dimensions: Ø 98mm • H 90mm
Print Area: Ø 73mm
Order Code: MAPP15XX

Pad #
15



Dimensions: Ø 57mm • H 48mm
Print Area: Ø 39mm
Order Code: MAPP54XX

Pad #
54



Dimensions: Ø 92mm • H 89mm
Print Area: Ø 66mm
Order Code: MAPP63XX


Pad #
63




Dimensions: Ø 150mm • H 105mm Print Area: Ø 95mm Order Code: MAPP64XX	Pad # 64
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Dimensions: Ø 129mm • H 85mm Print Area: Ø 105mm Order Code: MAPP65XX	Pad # 65
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Dimensions: Ø 48mm • H 58mm Print Area: Ø 22mm Order Code: MAPP72XX	Pad # 72
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Dimensions: Ø 63mm • H 70mm Print Area: Ø 40mm Order Code: MAPP73XX	Pad # 73
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Dimensions: Ø 48mm • H 50mm Print Area: Ø 28mm Order Code: MAPP74XX	Pad # 74
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Dimensions: Ø 57mm • H 57mm Print Area: Ø 32mm Order Code: MAPP82XX	Pad # 82
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Dimensions: Ø 46mm • H 47mm Print Area: Ø 31mm Order Code: MAPP83XX	Pad # 83
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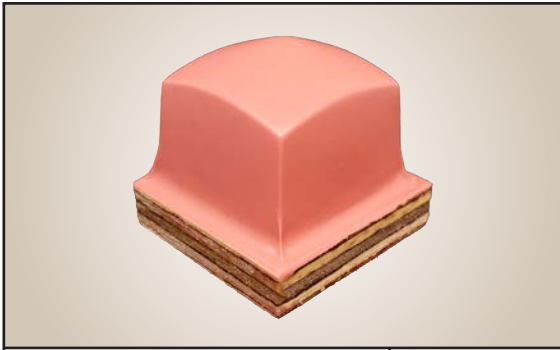
Dimensions: Ø 33mm • H 40mm Print Area: Ø 22mm Order Code: MAPP84XX	Pad # 84
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Dimensions: Ø 98mm • H 70mm
Print Area: Ø 63mm
Order Code: MAPP97XX

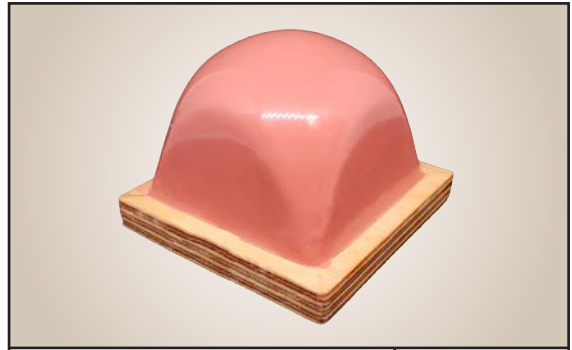
Pad #

97



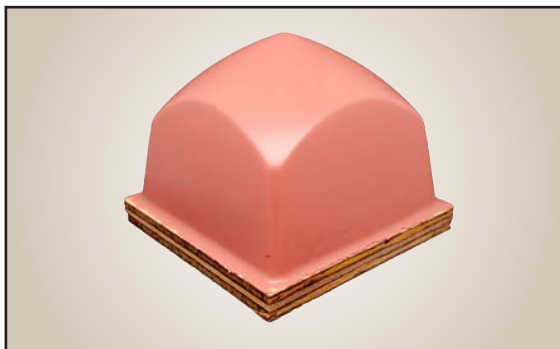
Dimensions: L 39 • W 39 • H 36mm
Print Area: 20 x 20mm
Order Code: MAPP18XX

Pad #
18



Dimensions: L 64 • W 64 • H 50mm
Print Area: 40 x 40mm
Order Code: MAPP19XX

Pad #
19



Dimensions: L 78 • W 77 • H 63mm
Print Area: 50 x 50mm
Order Code: MAPP20XX

Pad #
20



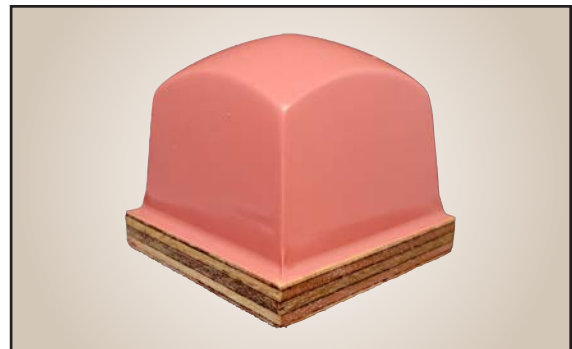
Dimensions: L 70 • W 70 • H 62mm
Print Area: 50 x 50mm
Order Code: MAPP21XX

Pad #
21



Dimensions: L 73 • W 70 • H 64mm
Print Area: 46 x 46mm
Order Code: MAPP22XX

Pad #
22



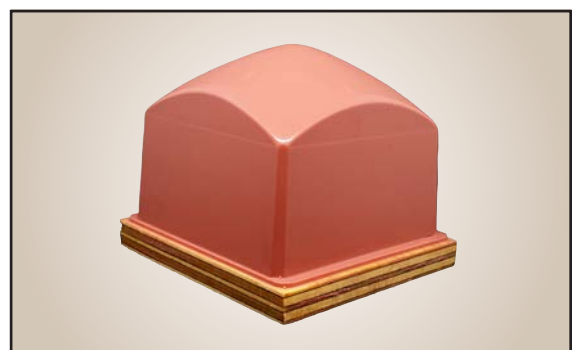
Dimensions: L 56 • W 56 • H 51mm
Print Area: 35 x 35mm
Order Code: MAPP23XX

Pad #
23



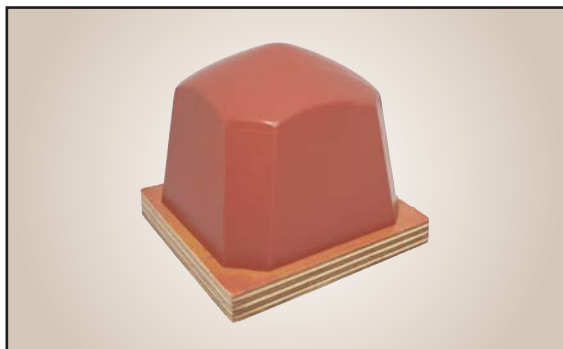
Dimensions: L 21 • W 21 • H 31mm
Print Area: 14 x 12mm
Order Code: MAPP59XX

Pad #
59



Dimensions: L 80 • W 73 • H 68mm
Print Area: 55 x 55mm
Order Code: MAPP80XX

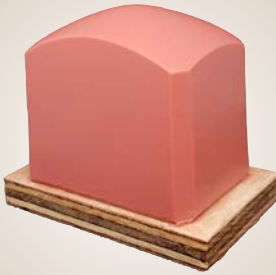
Pad #
80



Dimensions: L 78 • W 78 • H 70mm Print Area: 38 x 38 mm Order Code: MAPP92XX	Pad # 92
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Dimensions: L 71 • W 71 • H 65mm Print Area: 40 x 40 mm Order Code: MAPP94XX	Pad # 94
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Dimensions: L 68 • W 44 • H 60mm
Print Area: 43 x 26mm
Order Code: MAPP16XX

Pad #
16



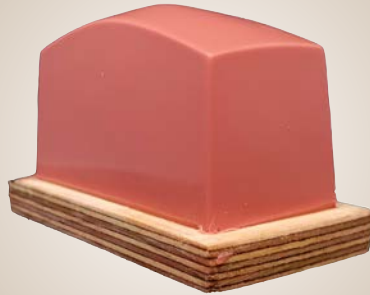
Dimensions: L 25 • W 20 • H 30mm
Print Area: 12 x 7mm
Order Code: MAPP17XX

Pad #
17



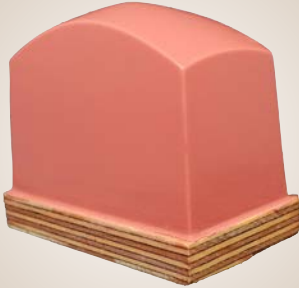
Dimensions: L 94 • W 48 • H 67mm
Print Area: 67 x 30mm
Order Code: MAPP24XX

Pad #
24



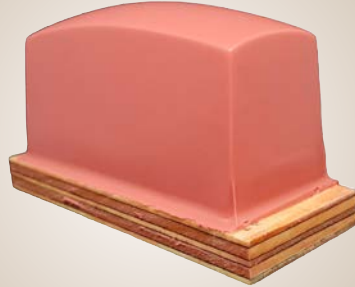
Dimensions: L 75 • W 42 • H 49mm
Print Area: 52 x 18mm
Order Code: MAPP25XX

Pad #
25



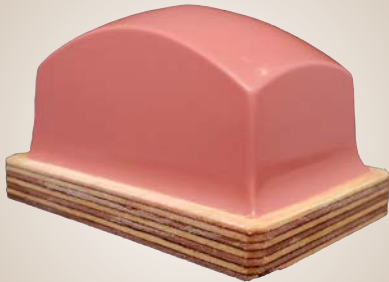
Dimensions: L 64 • W 35 • H 53mm
Print Area: 46 x 17mm
Order Code: MAPP26XX

Pad #
26




Dimensions: L 83 • W 37 • H 48mm
Print Area: 60 x 16mm
Order Code: MAPP27XX

Pad #
27



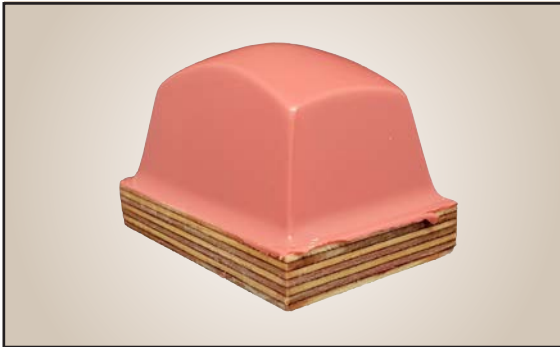
Dimensions: L 78 • W 53 • H 47mm
Print Area: 53 x 28mm
Order Code: MAPP28XX

Pad #
28



Dimensions: L 105 • W 70 • H 50mm
Print Area: 80 x 45mm
Order Code: MAPP29XX

Pad #
29



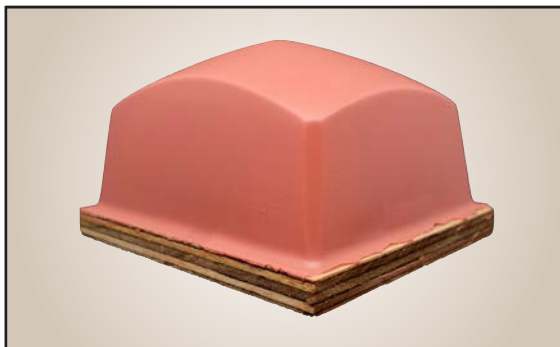
Dimensions: L 55 • W 35 • H 37mm
Print Area: 34 x 15mm
Order Code: MAPP30XX

Pad #
30



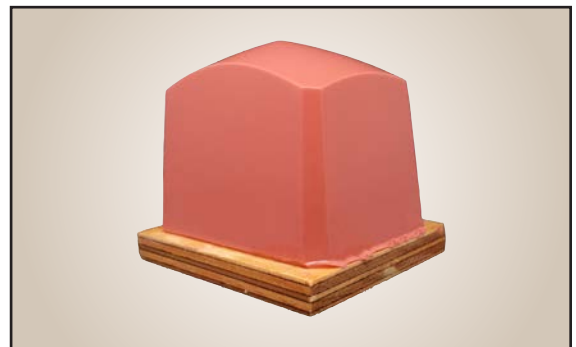
Dimensions: L 100 • W 34 • H 55mm
Print Area: 80 x 16mm
Order Code: MAPP31XX

Pad #
31



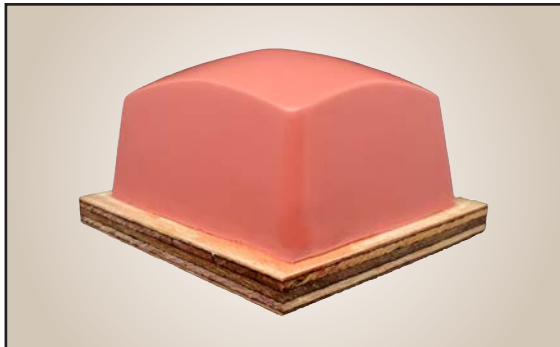
Dimensions: L 106 • W 90 • H 64mm
Print Area: 80 x 62mm
Order Code: MAPP32XX

Pad #
32



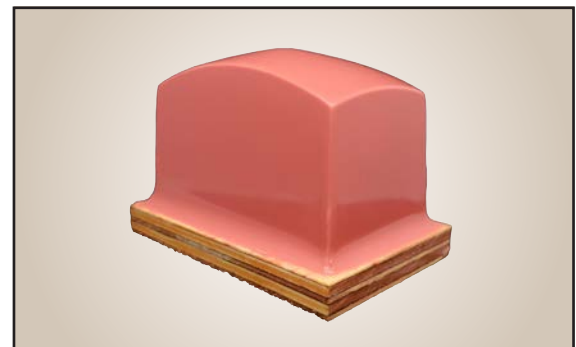
Dimensions: L 71 • W 60 • H 63mm
Print Area: 50 x 31mm
Order Code: MAPP33XX

Pad #
33



Dimensions: L 99 • W 89 • H 56mm
Print Area: 68 x 41mm
Order Code: MAPP34XX

Pad #
34



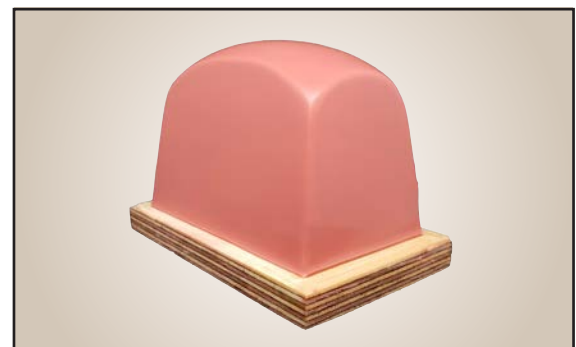
Dimensions: L 77 • W 51 • H 53mm
Print Area: 51 x 27mm
Order Code: MAPP36XX

Pad #
36



Dimensions: L 69 • W 40 • H 58mm
Print Area: 38 x 9mm
Order Code: MAPP37XX

Pad #
37



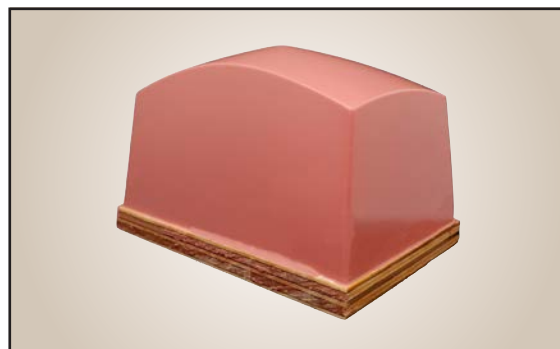
Dimensions: L 85 • W 54 • H 61mm
Print Area: 54x 23mm
Order Code: MAPP38XX

Pad #
38



Dimensions: L 134 • W 87 • H 74mm
Print Area: 101 x 47mm
Order Code: MAPP39XX

Pad #
39



Dimensions: L 102 • W 70 • H 67mm
Print Area: 83 x 44mm
Order Code: MAPP40XX

Pad #
40



Dimensions: L 121 • W 68 • H 60mm
Print Area: 103 x 44mm
Order Code: MAPP42XX

Pad #
42



Dimensions: L 125 • W 58 • H 66mm
Print Area: 104 x 37mm
Order Code: MAPP45XX

Pad #
45



Dimensions: L 125 • W 79 • H 66mm
Print Area: 98 x 54mm
Order Code: MAPP47XX

Pad #
47



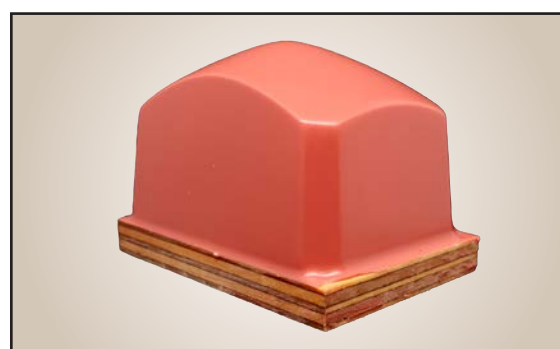
Dimensions: L 132 • W 95 • H 64mm
Print Area: 105 x 65mm
Order Code: MAPP48XX

Pad #
48



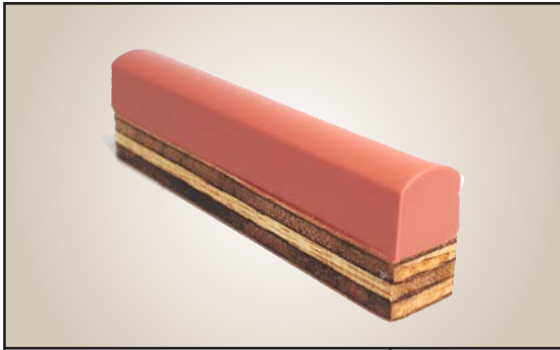
Dimensions: L 62 • W 44 • H 54mm
Print Area: 40 x 25mm
Order Code: MAPP50XX

Pad #
50



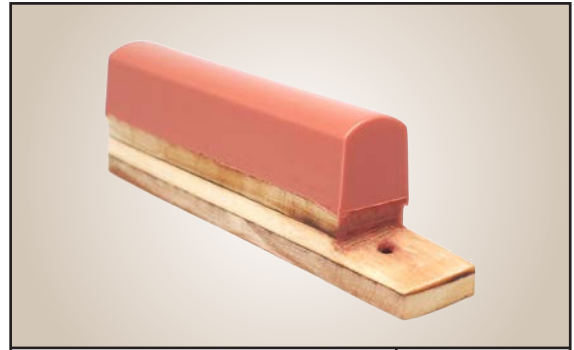
Dimensions: L 71 • W 50 • H 52mm
Print Area: 53 x 33mm
Order Code: MAPP53XX

Pad #
53



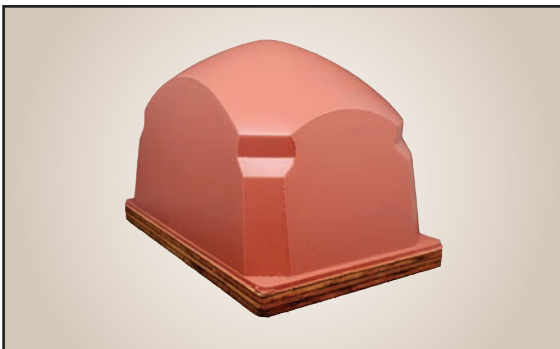
Dimensions: L 70 • W 13 • H 20mm
Print Area: 64 x 7mm
Order Code: MAPP60XX

Pad #
60



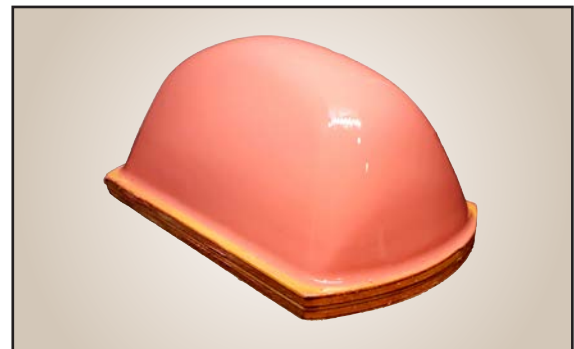
Dimensions: L 53 • W 13 • H 20mm
Print Area: 60 x 7mm
Order Code: MAPP61XX

Pad #
61



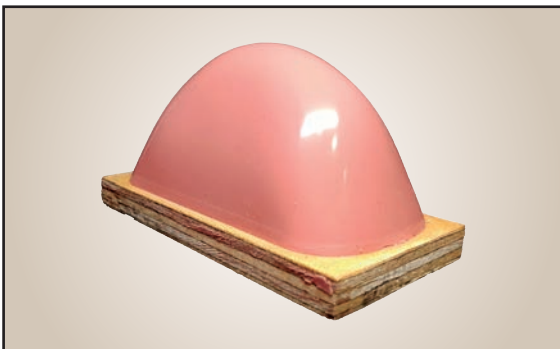
Dimensions: L 126 • W 87 • H 92mm
Print Area: 90 x 70mm
Order Code: MAPP62XX

Pad #
62



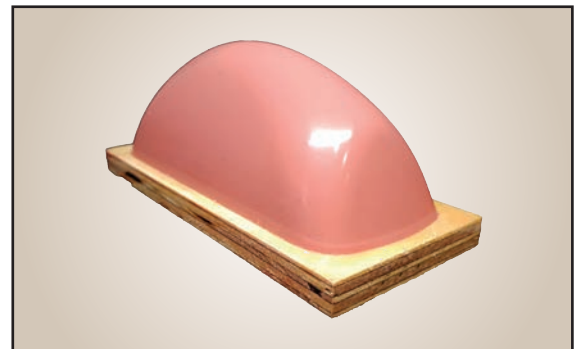
Dimensions: L 165 • W 96 • H 65mm
Print Area: 90 x 20mm
Order Code: MAPP66XX

Pad #
66



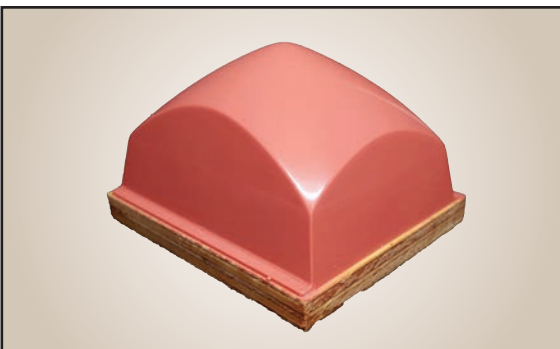
Dimensions: L 92 • W 50 • H 50mm
Print Area: 47 x 10mm
Order Code: MAPP68XX

Pad #
68



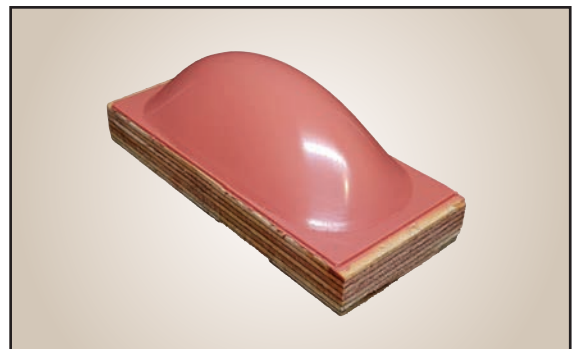
Dimensions: L 129 • W 54 • H 52mm
Print Area: 75 x 16mm
Order Code: MAPP69XX

Pad #
69



Dimensions: L 79 • W 70 • H 53mm
Print Area: 58 x 42mm
Order Code: MAPP70XX

Pad #
70



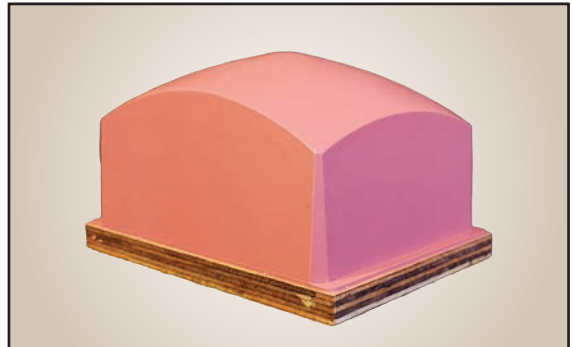
Dimensions: L 79 • W 34 • H 30mm
Print Area: 47 x 13mm
Order Code: MAPP71XX

Pad #
71



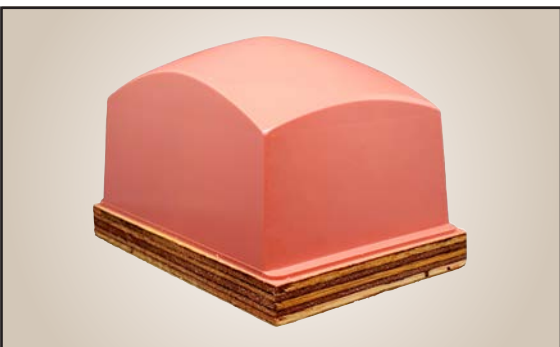
Dimensions: L 83 • W 46 • H 55mm
Print Area: 61 x 24mm
Order Code: MAPP76XX

Pad #
76



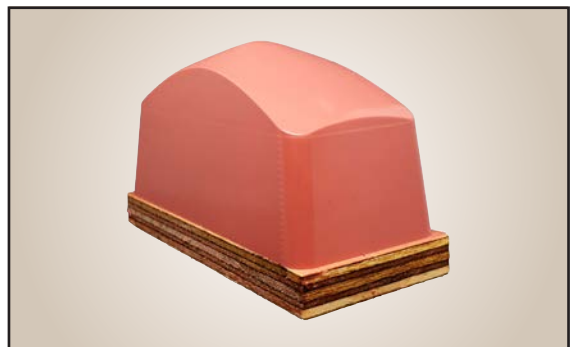
Dimensions: L 149 • W 108 • H 90mm
Print Area: 118 x 91mm
Order Code: MAPP77XX

Pad #
77



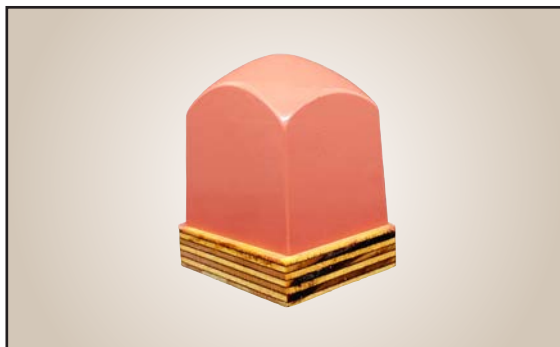
Dimensions: L 118 • W 79 • H 72mm
Print Area: 88 x 60mm
Order Code: MAPP78XX

Pad #
78



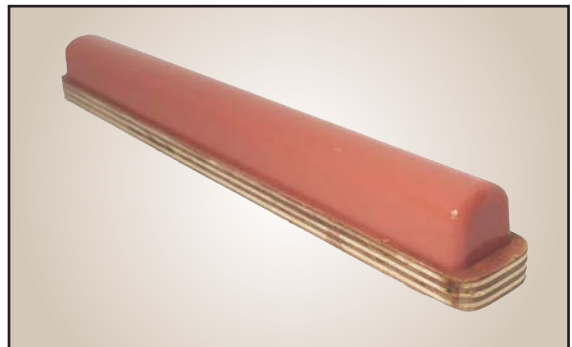
Dimensions: L 129 • W 63 • H 66mm
Print Area: 103 x 43mm
Order Code: MAPP79XX

Pad #
79



Dimensions: L 46 • W 37 • H 46mm
Print Area: 32 x 23mm
Order Code: MAPP81XX

Pad #
81



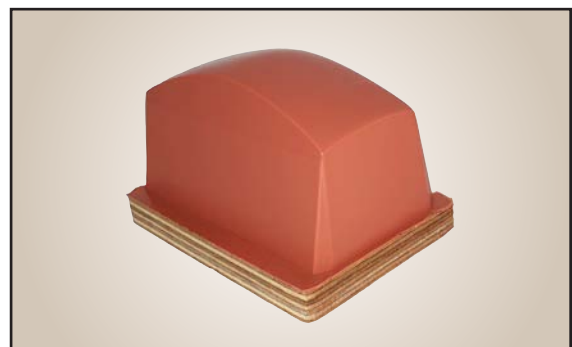
Dimensions: L 220 • W 26 • H 25mm
Print Area: 190 x 10 mm
Order Code: MAPP85XX

Pad #
85



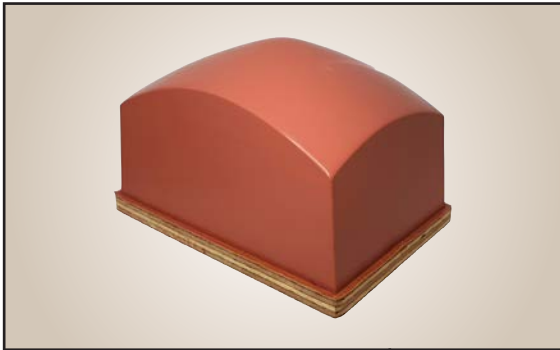
Dimensions: L 80 • W 39 • H 56mm
Print Area: 63 x 27mm
Order Code: MAPP86XX

Pad #
86

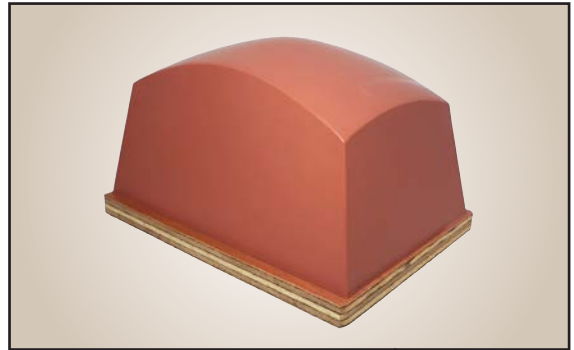


Dimensions: L 77 • W 53 • H 48mm
Print Area: 53 x 15mm
Order Code: MAPP87XX

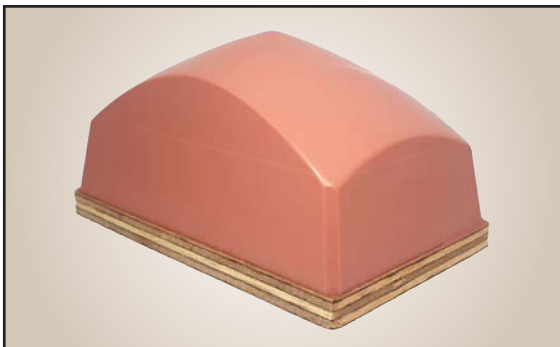
Pad #
87



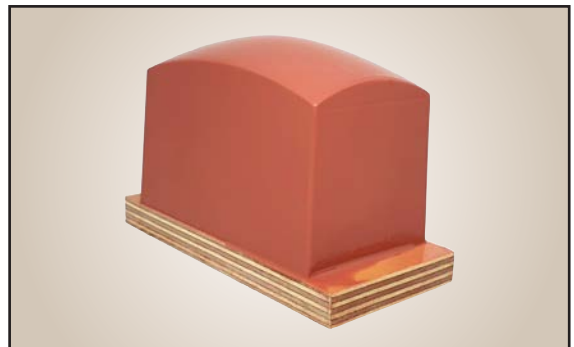
Dimensions: L 138 • W 99 • H 88mm Print Area: 100 x 70mm Order Code: MAPP88XX	Pad # 88
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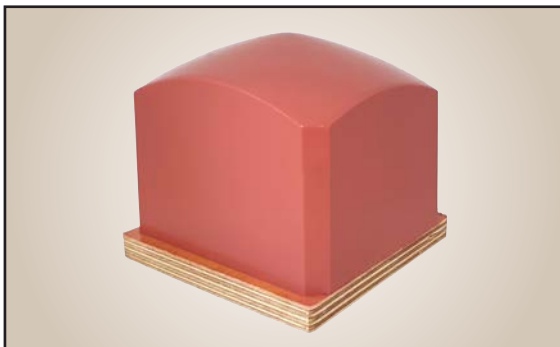
Dimensions: L 138 • W 99 • H 82mm Print Area: 95 x 51mm Order Code: MAPP89XX	Pad # 89
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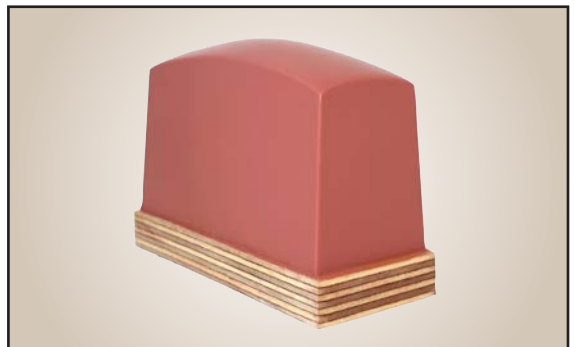
Dimensions: L 127 • W 82 • H 70mm Print Area: 93 x 51mm Order Code: MAPP90XX	Pad # 90
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Dimensions: L 104 • W 52 • H 70mm Print Area: 60 x 30mm Order Code: MAPP91XX	Pad # 91
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Dimensions: L 88 • W 87 • H 81mm Print Area: 65 x 58mm Order Code: MAPP93XX	Pad # 93
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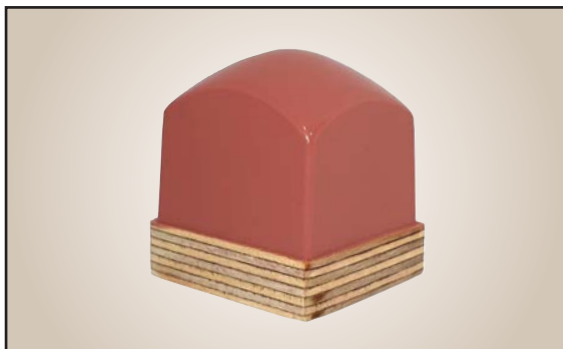
Dimensions: L 79 • W 34 • H 56mm Print Area: 55 x 13mm Order Code: MAPP95XX	Pad # 95
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Dimensions: L 45 • W 27 • H 40mm Print Area: 24 x 7mm Order Code: MAPP99XX	Pad # 99
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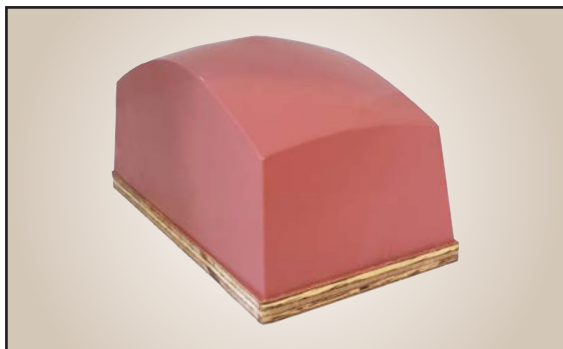


Dimensions: L 25 • W 20 • H 28mm Print Area: 13 x 9mm Order Code: MAPP100XX	Pad # 100
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Dimensions: L 36 • W 32 • H 40mm
Print Area: 21 x 16mm
Order Code: MAPP101XX

Pad #
101



Dimensions: L 178 • W 88 • H 87mm
Print Area: 144 x 57mm
Order Code: MAPP104XX

Pad #
104



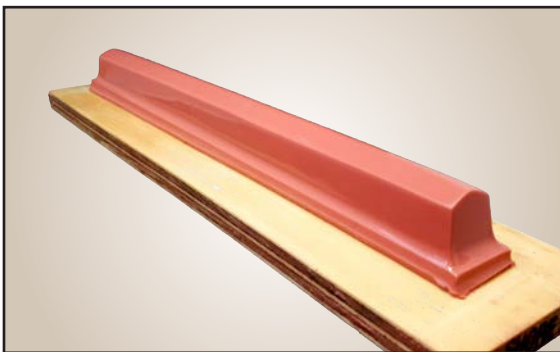
Dimensions: L 80 • W 73 • H 70mm
Print Area: 50 x 20mm
Order Code: MAPP07XX

Pad #
07



Dimensions: L 90 • W 34 • H 37mm
Print Area: 69 x 10mm
Order Code: MAPP41XX

Pad #
41



Dimensions: L 237 • W 55 • H 31mm
Print Area: 187 x 4mm
Order Code: MAPP46XX

Pad #
46



Dimensions: L 80 • W 23 • H 37mm
Print Area: 63 x 7mm
Order Code: MAPP49XX

Pad #
49



Dimensions: L 89 • W 21 • H 35mm
Print Area: 70 x 15mm
Order Code: MAPP56XX

Pad #
56



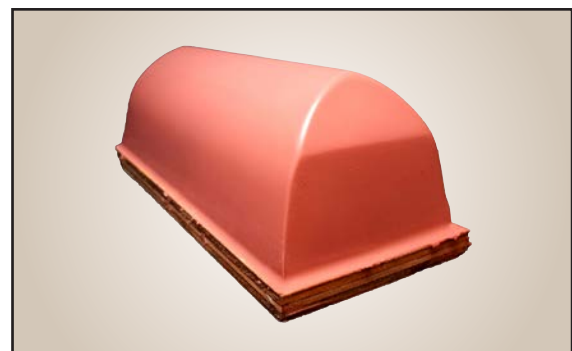
Dimensions: L 70 • W 15 • H 26mm
Print Area: 55 x 10mm
Order Code: MAPP57XX

Pad #
57



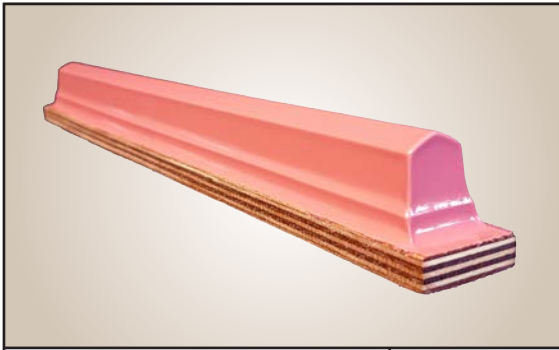
Dimensions: L 80 • W 12 • H 25mm
Print Area: 75 x 5mm
Order Code: MAPP58XX

Pad #
58



Dimensions: L 170 • W 70 • H 60mm
Print Area: 120 x 13mm
Order Code: MAPP67XX

Pad #
67



<p>Dimensions: L 312 • W 30 • H 33mm Print Area: 282 x 5mm Order Code: MAPP75XX</p>	<p>Pad # 75</p>
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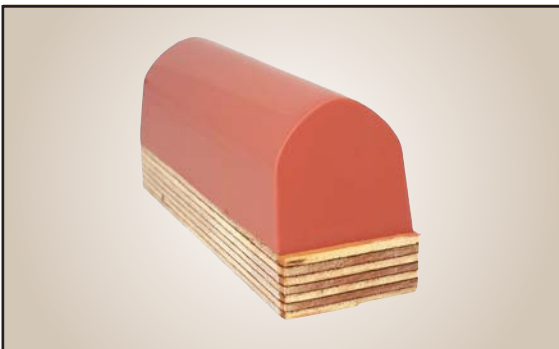
<p>Dimensions: Ø 87 • H 68mm Print Area: 51 x 18mm Order Code: MAPP96XX</p>	<p>Pad # 96</p>
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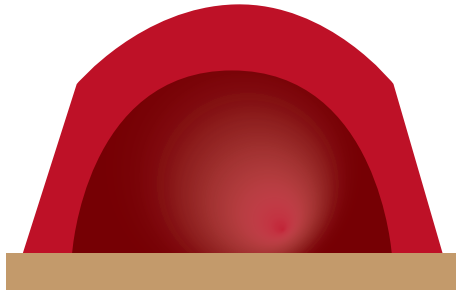
<p>Dimensions: Ø 57 • H 52mm Print Area: 28 x 9mm Order Code: MAPP98XX</p>	<p>Pad # 98</p>
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<p>Dimensions: L 56 • W 35 • H 35mm Print Area: 44 x 10mm Order Code: MAPP102XX</p>	<p>Pad # 102</p>
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<p>Dimensions: L 73 • W 24 • H 32mm Print Area: 48 x 6mm Order Code: MAPP103XX</p>	<p>Pad # 103</p>
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Cavity pads (or Hollow Pads) are specially made with an air filled space sealed in the centre of the pad (as pictured to the left). The advantage of this type of pad is that you can still have a higher shore (harder) silicone on the print face while having additional flexibility required for delicate parts or where the print has to wrap further around a curved surface.

These pads are ideal for printing onto items such as delicate glassware, fragile circuitry or electrical parts amongst others.




Dimensions: Ø 94mm • H 70mm Print Area: Ø 70mm Order Code: MAPP08XX	Pad # 811
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Dimensions: Ø 72mm • H 68mm Print Area: Ø 47mm Order Code: MAPP12XX	Pad # 121
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Dimensions: Ø 82mm • H 68mm Print Area: Ø 57mm Order Code: MAPP14XX	Pad # 141
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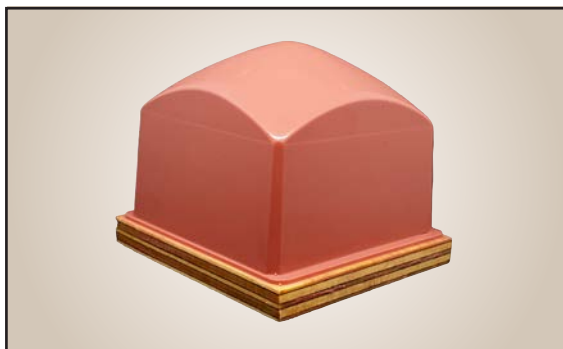
Dimensions: L 125 • W 58 • H 66mm Print Area: 104 x 37mm Order Code: MAPP45XX	Pad # 451
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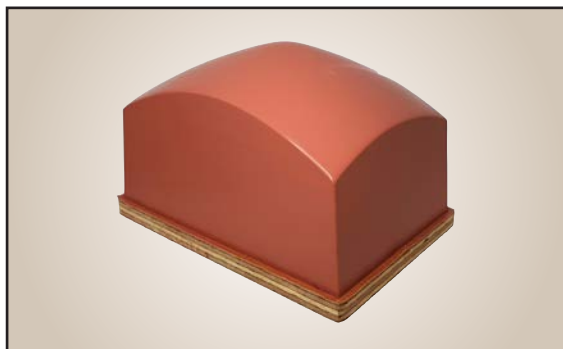
Dimensions: Ø 92mm • H 89mm Print Area: Ø 66mm Order Code: MAPP63XX	Pad # 631
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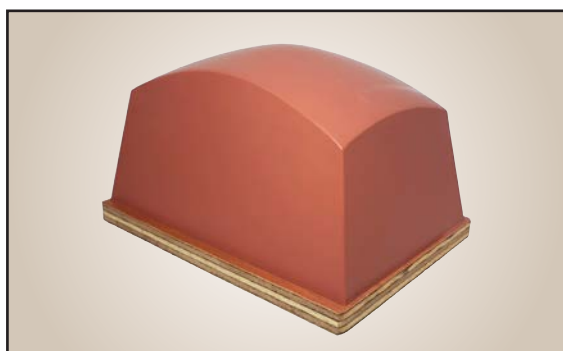
Dimensions: Ø 63mm • H 70mm Print Area: Ø 40mm Order Code: MAPP73XX	Pad # 731
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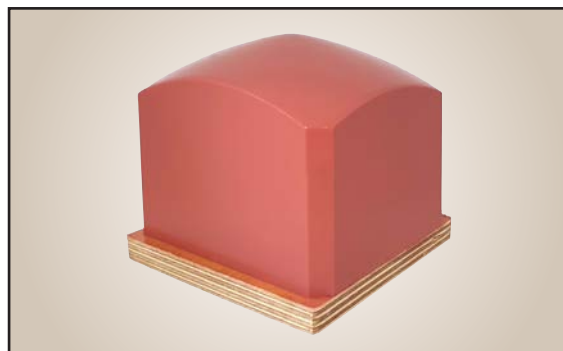
Dimensions: L 80 • W 73 • H 68mm Print Area: 55 x 55mm Order Code: MAPP80XX	Pad # 801
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Dimensions: L 138 • W 99 • H 88mm Print Area: 100 x 70mm Order Code: MAPP88XX	Pad # 881
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Dimensions: L 138 • W 99 • H 82mm Print Area: 95 x 51mm Order Code: MAPP89XX	Pad # 891
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Dimensions: L 88 • W 87 • H 81mm Print Area: 65 x 58mm Order Code: MAPP93XX	Pad # 931
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