

## GerberCUT Routing Chart

Commonly printed rigid substrates with the recommended settings for routing

| Material   | Bit                        | Velocity X/Y (IPM) | Velocity Z (IPM) | RPM    | Multi Pass Depth | Notes   |
|--|----------------------------|--------------------|------------------|--------|------------------|---|
| <b>Aluminum (6061)</b>   | AW, GP, HPF                | <b>30</b>          | <b>15</b>        | 21,000 | .125             | Easiest aluminum to rout.   |
| <b>Aluminum (5052)</b>   | AW, GP, HPF                | <b>30</b>          | <b>15</b>        | 21,000 | .125             | Material hardness variations may cause bit breakage or galled edges.  |
| <b>Aluminum (3003)</b>   | AW, GP, HPF                | <b>30</b>          | <b>15</b>        | 21,000 | .125             | Most difficult aluminum to rout. Softness variations will cause bit breakage and galled edges. Avoid high RPM low feed rate combinations. |
| <b>Aluminum Composite - (DIBOND®, ALUCOBOND®, DILITE®)</b>                                       | AW, GP                     | <b>150</b>         | <b>60</b>        | 19,000 | .188             |   |
| <b>MDO (medium density overlay)</b>  | LV, GP                     | <b>130</b>         | <b>40</b>        | 19,000 | .25              |   |
| <b>MDF (medium density fibreboard)</b>   | LV, GP                     | <b>130</b>         | <b>40</b>        | 19,000 | .25              |   |
| <b>PVC Foam – (Celtec®, Trovicel®, Sintra®, Kometex®, etc.)</b>                                  | HPF, SPF, GP               | <b>150</b>         | <b>40</b>        | 19,000 | .5               |   |
| <b>Polystyrene</b>   | SPF, GP                    |                    |                  |        |                  |   |
| <b>Acrylic (cast)</b>  | HPF, GP                    | <b>150</b>         | <b>60</b>        | 19,000 | .188             |   |
| <b>Acrylic (extruded)</b>  | SPF, GP                    | <b>150</b>         | <b>60</b>        | 19,000 | .188             |   |
| <b>Polycarbonate - (Lexan®)</b>  | SPF, GP                    |                    |                  |        |                  |   |
| <b>Foam Board – (clay coated paper and styrene surfaces; Fome-Cor®, Gatorfoam®, Gatorplast®)</b> | GP, APS, SPF               | <b>70</b>          | <b>50</b>        | 17,000 | .5               | Climb mill when using APS bit.  |
| <b>Corrugated Plastic – (Coroplast™)</b>   | 1/16” diameter bit GP, APS | <b>50</b>          | <b>40</b>        | 19,000 | .5               | Expect good surface edge with some chadding of cells. Climb mill when using APS bit.  |