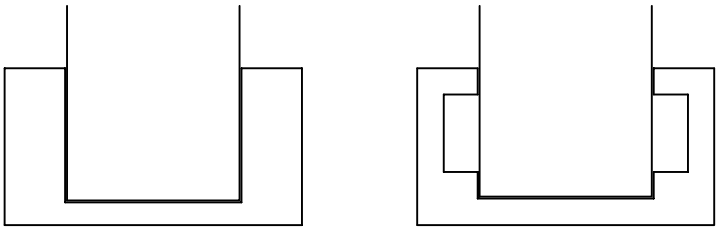
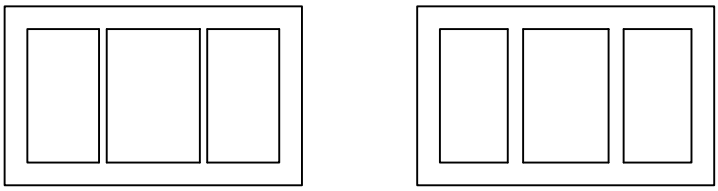
simmal
Solutions in aluminium

UNIFORM WALL THICKNESS



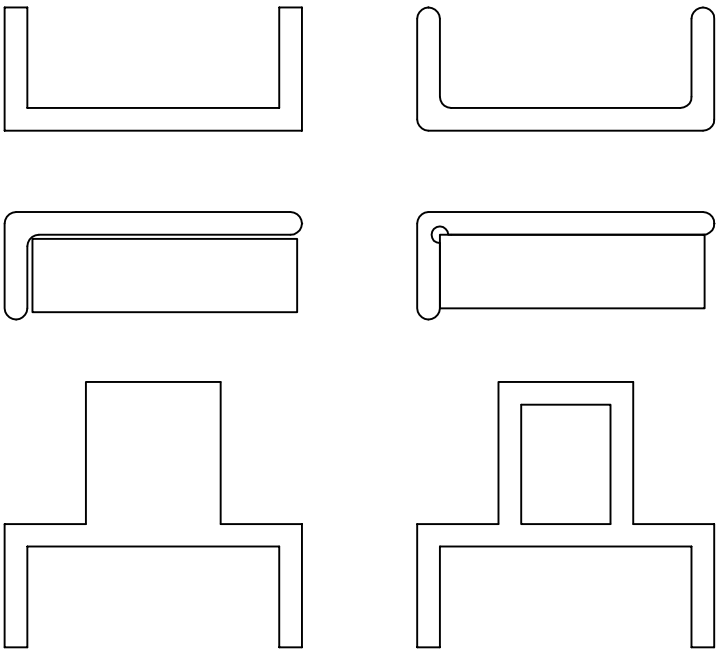
IT IS ACCEPTABLE TO HAVE A RANGE OF WALL THICKNESSES WITHIN A SINGLE PROFILE, HOWEVER UNIFORM WALL THICKNESS WILL MAKE THE PROFILE EASIER TO EXTRUDE.



IT IS AN ADVANTAGE IF THE INTERNAL AND EXTERNAL WALL THICKNESSES ARE SIMILAR - THIS DECREASES DIE STRESS AND IMPROVES EXTRUDABILITY.

IT IS ACCEPTABLE TO HAVE WALLS OF DIFFERENT THICKNESSES WHERE THE ADVANTAGE OUTWEIGH THE DISADVANTAGE - eg. FOR STRENGTH REASONS IT MAY BE BEST TO CONCENTRATE WEIGHT AWAY FROM THE CENTRE OF MASS.

USE OF SOFT LINES



EXTRUSION CANNOT ACHIEVE RAZOR SHARP CORNERS. CORNERS NEED TO BE ROUNDED AND OFTEN 0.5mm - 1mm IS SUFFICIENT.

A DESIGN MAY SOMETIMES DEMAND SHARP INTERNAL ANGLES TO ENCLOSE SHAPES - THIS IS OVERCOME BY INCORPORATING A SMALL CUT OUT

SHARP TIPS SHOULD BE AVOIDED WHERE POSSIBLE AS THE TIP CAN BECOME WAVY AND UNEVEN - TIPS SHOULD ALSO BE ROUNDED.

PROFILES WITH LARGE VARIATIONS IN WALL THICKNESS COOL UNEVENLY. THIS GIVES RISE TO A VISIBLE STRUCTURAL UNEVENNESS THAT IS PARTICULARLY MARKED AFTER ANODISING.