

Designing for Moulding

Mechanical Engineering

The geometry rules that come from how plastic flows, packs and shrinks.

Almost every moulding defect traces back to uneven wall thickness.

Do

Keep the wall thickness uniform

Put 1 to 2 degrees of draft on every face

Size ribs at 0.5 to 0.6 of the wall

Radius every internal corner

Gate into the thickest section

Avoid

Thick sections: they sink and void

Sharp corners: they concentrate stress

Undercuts: they need side actions

Bosses joined straight onto a wall

Text or logos across a parting line

Shrinkage runs from about half a per cent for filled grades to two per cent or more for unfilled polyolefins.