Simply Stairs

Chapter 1. Let's Talk Stairs! The language of stairs Setting out terms Building Regulations Measuring up

Chapter 2. Staircase Calculations Rise & Going Calculator

Chapter 3. Tools of the Trade Making a router jig Avoiding 'rounding'

Chapter 4. Straight-flight Stairs

Using calculations to design the staircase Cutting list and timber preparation Marking out the strings Routing the strings Router jigs: shop-made vs proprietary Preparing the newel posts Preparing the treads Draw-bore preparation Ancillary components and final preparation before assembly Staircase assembly Protection of stairs during and after delivery

Chapter 5. L-Shaped Stairs with Quarter Landing

Staircase calculations Cutting list Gluing up Marking out the strings Cutting and mitring the outer strings Preparing the newel posts Providing mitred nosing returns to straight treads Ancillary components and final preparation before assembly Staircase assembly Quarter landing Final installation

Chapter 6. L-Shaped Stairs with Kite and Winders

Building Regulations Staircase calculations Setting out Geometry Use of scale drawings **Cutting list** Pitch board and router jig Preparation of wall and return strings String marking and routing Preparing the newel posts Preparing the treads Fitting the winders Preparing the landing nosing Ancillary components and final preparation before assembly Staircase assembly Pre-fitting the winding steps before delivery On-site preparation prior to fixing Final installation

Chapter 7. Dogleg Stairs with Half-Turn Landing

Stairwell dimensions Staircase dimensions Cutting list Preparing the straight flights Preparing the newel posts Staircase assembly Half landing Final installation

Chapter 8. Circular Stairs

Building Regulations Staircase design and dimensions Setting out Circle geometry Developing the strings Flexi ply requirements Cutting list Building a bending form Marking out the wall string Marking and cutting the flexi ply Laminating the circular strings Trimming and routing the wall string

Marking out the open string Veneering the strings' edges Cutting and mitring the open string Preparing the newel post Providing mitred nosing returns to tapered treads Final preparation before assembly Staircase assembly Fitting the curtail step **Chapter 9. Alternating Tread Stairs** Design **Building Regulations** Stair dimensions **Cutting list** Pitch board and router jig String marking Routing the strings Newel posts Preparing paddle-shaped treads Routing the tread nosings **Open risers** Finishing the treads and risers Ancillary components and final preparation before assembly Staircase assembly On-site preparation prior to fixing **Chapter 10. Special Features** Constructing a round-end step Constructing a bullnosed step Cut and mitred strings: methods of cutting **Open-to-closed strings** Newel capping Chapter 11. Railings **Building Regulations** Balustrade, types and designs Balustrade centre line Newel posts Handrail Establishing the handrail length Shaping the handrail Fixing handrail to newel posts **Balusters** Constructing a post-to-post balustrade for a closed-string staircase **Baluster calculations Cutting list Balustrade assembly** Fixing balusters on a closed-string staircase Constructing a post-to-post balustrade for an open-string staircase **Cutting list** Marking baluster centres Drilling for dowels Marking baluster lengths Fixing balusters on an open-string staircase Constructing an over-the-post balustrade for a circular staircase Design **Cutting list** Forming circular handrail Cleaning up before routing Creating a 'kink' in the handrail Routing circular handrail Using the volute template Marking and cutting the volute and upward easing Marking, cutting, and assembling the handrail Joining handrail to upper newel post Joining volute newel post and last baluster to curtail step Chamfering the balusters Final balustrade installation

12. Repairing Stairs

Creaks: the causes Curing a creaky staircase Replacing wedges Separation of string from wall Screwing risers to treads Replacing angled glue blocks Finishing the underside of stairs Replacing broken balusters Securing a loose newel post Installing new balcony balustrade Wall-mounted handrail Fixing wall-mounted handrail brackets to a wall Lengthening handrail