Floor Design (FD)

Reference	Description
FD.1	**FLOOR TYPES**
FD.1.1	Location - Ground Floor
FD.1.2	Location - Intermediate Floor
FD.1.3	Location - Three storey and above
RD.1.2	Flooring Specifications

FD.2	**JOIST TYPES**
FD.2.1.1	Function - Modular Joists
FD.2.1.2	Function - Girder Joists
FD.2.1.3	Function - Trimmers
FD.2.1.4	Function - Floor Fillers
FD.2.2.1	Material - Posi-Joists (see section FD.9)
FD.2.2.2	Material - I-Joists
FD.2.2.3	Material - Solid-Joists
FD.2.2.4	Material - Others (Steel / LVL / Glulam / CLT)

FD.3	**LOADS**
FD.3.1	Dead
FD.3.1.1	Minimum Dead Loads for Intermediate Posi-Joist Floors
FD.3.2	Live
FD.3.2.1	Imposed Loads - Unfiorm Loads and Point Loads
FD.3.3	Top Chord
FD.3.4	Bottom Chord
FD.3.5	Hoist Load
FD.3.6	Care Homes
FD.3.7	Screedflo
FD.3.8	Building Categories
FD.3.9	Tank Load
FD.3.10	Point Loads
FD.3.11	Load Transfer
FD.3.12	Partition Loads
FD.3.13	Stair Loading in Pamir

FD.4	**ENGINEERING PRINCIPLES**
FD.4.1	CSI
FD.4.2	Forces, Moments, etc.
FD.4.3.1	Deflection - Recommended Limits
FD.4.3.2	Deflection - Compound Deflections
FD.4.3.3	Deflection - Screedflo Limits
FD.4.3.4	Deflection - 14mm limit for Posi-Joists
FD.4.3.5	Deflection - Additional Consideration Required
FD.4.3.6	Deflection - NHBC Technical Standards 2023
FD.4.3.7	SLS Span Check Settings - Overhang and Cantilever
FD.4.4	Vibration Checks
FD.4.5	Posi reinforcement Dos and Donts

FD.5	SOUND RESISTANCE / ROBUST DETAILS
FD.5.1	E-FT-3
RD.5.1.1	E-FT-6 Screed Board flooring
RD.5.2	Posi Approved Details

FD.6	FIRE RESISTANCE
FD.6.1	Posi Approved Details
FD.6.2.1	Materials - 30 Minutes Resistance
FD.6.2.2	Materials - 60 Minutes Resistance
FD.6.2.3	Materials - 90 Minutes Resistance
FD.6.3	Posi-Joist FireSafe and FireSafe+

FD.7	PAMIR
FD.7.2.1.1	Pamir - Posi-Joists - End Detail Options
FD.7.2.1.3	Pamir - Posi-Joists - Roofs
FD.7.2.2	Pamir - Traditional Floors / Floor Cassettes

FD.8	WORKSHOPS / TRAINING FOR PAMIR
FD.8.1	Existing Courses
FD.8.2	On-line Courses
FD.8.3	Challenges (Beginner through to Expert)
FD.8.4	Real Life Design Examples

FD.9	POSI-JOIST
FD.9A	POSI-JOIST - GENERAL
FD.9A.1	Basics
FD.9A.2	Uses
FD.9A.3	Advantages
FD.9A.4	Spacings
FD.9A.5	Posi Tips & Tricks
FD.9A.6	Posi Nail Plates
FD.9A.7	Camber
FD.9A.8	Manufacturers
FD.9A.9	Basics of Posi technology and Floor Cassettes

FD.9B	POSI-JOIST - STRUTS
FD.9B.1.2	Typical Sizes - Residential and Commercial
FD.9B.1.1	Posi-Struts - Use in Corrosive Environments

FD.9C	POSI-JOIST - BASIC CONSIDERATIONS
FD.9C.1.1	Openings
FD.9C.1.2	Openings - Gallery/Mezzanine
FD.9C.3	Floor Performance
FD.9C.4	Balconies and Walkable Roofs

FD.9D	POSI-JOIST - STANDARD DETAILS
FD.9D.1.1	Support Details - Top Hung
FD.9D.1.2	Support Details - Extended Chord / Fire Cut

FD.9D.1.3	Support Details - Minimum Bearings
FD.9D.1.4	Support Details - Interior Details
FD.9D.1.5	Support Details - Steel Support Details
FD.9D.1.6	Support Details - Trimmable Ends
FD.9D.1.7	Support Details - Posi-Joist Block Sizes
FD.9D.2	DXF Details Library
FD.9D.3	World of Posi Technology Book
FD.9D.4.1	Staggered Webs
FD.9D.4.2	Staggered Webs - Utilisation of Half Webs
FD.9D.4.3	Staggered Webs - 147mm Chords

FD.9E	**POSI-JOIST - BRACING (STRONGBACK)**
FD.9E.1	When are Strongbacks required?
FD.9E.1	Why are Strongbacks required?
FD.9E.1	Benefits to design when using Strongbacks?
FD.9E.2	Services through strongbacks

FD.9F	**POSI-JOIST - HANGERS**
FD.9F.1.1	Hanger Types - Simpson Strong-Tie
FD.9F.1.2	Hanger Types - Cullen
FD.9F.2	Joist Reinforcement
FD.9F.3	Manual Design
FD.9F.4	Bearing Lengths
FD.9F.5	Joist supported from Pole Plates
FD.9F.6	Hangers fixed to Timber frame Walls

FD.9G	**POSI-JOIST - ON SITE**
FD.9G.1	Do's and Don'ts - Cutting, Drilling, Notching, Removing Webs
FD.9G.2	Storage /Handling
FD.9G.3	Installation Guide
FD.9G.4	Supporting additional weights during construction
FD.9G.5	Supporting additional weights during construction - Brick and Block

FD.9H	**POSI-JOIST - REMEDIAL WORKS**
FD.9H.1	Site Damage
FD.9H.2	Drilled / Notched Joists
FD.9H.3	Upside Down Joists
FD.9H.4	Bearing in wrong location

FD.9J	**POSI-JOIST - SPAN TABLES**
FD.9J.1	Posi-Joist Span Tables - MiTek span calculator on website

FD.12	**POSI-JOIS - MANUFACTURE**
FD.12.1	Posi-Joist Manufacturing Checks
FD.12.2	Posi-Joist Manufacturing Tolerances
FD.12.3	Posi-Joist Timber Tolerances
FD.12.4	Strut-Runner Programming Instructions
FD.12.5	Birch Press Instructions for Staggered Posi-Joist webs

FD.12.6	Posi-Joist Manufacturing Standard
FD.12.7	Request for Product Guarantees in Relation to Posi-Joists