

CONTENTS

	Page no.
1. INTRODUCTION	1
1.1 Legislation and Health and Safety Requirements	1
2. FLOORING REQUIREMENTS	5
3. STRUCTURAL FLOOR SLAB	10
3.1 General Requirements	10
3.2 Suitability of an Existing Slab	11
3.2.1 Substrate strength	12
3.2.2 Substrate moisture	12
3.2.3 Surface adhesion	12
3.3 Floor Openings	13
3.4 Surface Preparation of an Existing Slab	13
3.4.1 Captive blasting	13
3.4.2 Mechanical scarification (scabbling)	13
3.4.3 Thermal preparation	14
4. MOVEMENT JOINTS	16
5. SUBSTRATES	20
5.1 Screeds	20
5.1.1 Fine concrete	20
5.1.2 Sand cement	21
5.1.3 Polymer modified	21
5.1.4 Proprietary cementitious	21
5.1.5 Proprietary resin	21
5.2 Overlaying Timber Floors	21
5.2.1 Wood block floors	22
5.2.2 Tongue and groove floor boards	22
5.2.3 Sheet flooring	22
5.2.4 Wood strip flooring	22
5.2.5 End grain blocks	22

6.	DRAINAGE	23
6.1	Introduction	23
6.2	Falls on Floor Surface	23
6.3	Bay Sizes	23
6.3.1	Point drainage to a single gully	24
6.3.2	Linear drainage to a channel	24
6.4	Gullies	24
6.5	Channels	25
6.5.1	Rectangular section channel	25
6.5.2	"V" bottom channel	26
6.5.3	Half round channel	26
6.5.4	Shallow channel	26
6.5.5	Aperture channel	26
6.5.6	Flooring/drainage Interface	26
6.6	Drainage Pipes	27
7.	FLOORING	35
7.1	Concrete Flooring	35
7.1.1	Direct finished base slab	35
7.1.2	High strength concrete topping	35
i.	Monolithic concrete	36
ii.	Separate construction	36
7.2	Tiled Floors	37
7.2.1	Features of the ceramic floor tile	38
i.	Colour	38
ii.	Surface texture	38
iii.	Sizes	39
iv.	Permeability	39
7.2.2	Bedding	40
i.	Sandcement mortar bonded to a base	40
ii.	Semi-dry sand/cement	40
iii.	Adhesives	41
7.2.3	Grouting	41
7.3	Membranes for Tiled Floors	42
7.3.1	Vibration system membrane (reinforced)	42
7.4	Resin Based Seamless Floors	43
7.4.1	Epoxies	43
7.4.2	Polyurethanes	44
7.4.3	Polyesters	45
7.4.4	Methacrylates	46

7.4.5	Polymer modified cementitious systems	47
7.4.6	Micro silica concrete	48
7.5	Slip Resistant Sheet Vinyl Flooring	48
7.6	Membranes for Resin and Sheet Vinyl Flooring	49
7.7	Anti-microbial Products	50
7.8	Taint	51
7.9	Testing	51
7.9.1	Water absorption	51
7.9.2	Organic soil cleanability	52
7.9.3	Bacterial cleanability	52
7.9.4	Slip resistance	53
7.9.5	Taint transfer	54
7.9.6	Antibacterial testing	54
8.	CLEANING/MAINTENANCE AND REPAIR	58
8.1	Effect of Cleaning on Floor Finish	58
8.2	Floor Maintenance	58
8.3	Repairs	59
APPENDICES		
A	Glossary of terms	61
B	Standards	66
C	Bibliography	67