Concrete Imprint Specification & Method of Works All Type of Patterns Design

TEXTURED CONCRETE IMPRINT SPECIFICATION INFORMATION ON USING CONCRETE STAMPING MOULDING SYSTEM

Sub Base

The sub-grade shall be of good bearing capacity and are not generally subject to volume change. The consolidation of sub-grade materials shall be carried out in layers maximum 6" OR until 12" in its loose state, evenly spread and well consolidated. Plate vibratory compactors or large rollers shall be employed to compact the area. Sub-base preparation shall be the same as shall be required for a regular concrete slab (the scope of this work is generally carried out by the Main Contractor).

CONCRETE

<u>Single Course</u> <u>Monolithic Floors</u>

The special mix design of <u>Concrete</u> used <u>20Mpa</u> <u>[G20]</u> <20mmØ or <u>25Mpa [G25]</u> <20mmØ size aggregate with slump of 75mm or less and with no more than 3% entrained air.

For heavy duty traffic area, concrete design for at least <u>30Mpa <20mmØ</u> size aggregate shall be used (thickness of the slab & type of reinforcement are important design consideration).

Two Course Floors

The topping shall be normal Portland cement properly graded sand and <20mmØ gravel as above, properly proportioned to meet strength requirements and with a slump of 50mm or less. When topping to be bonded to a set base slab, the surface of the existing slab shall be roughened and all laitance, dirt etc. be completely removed. Special bonding compound or cement slurry shall be applied into the surface immediately ahead of placing the topping. Minimum recommended topping shall be above 2" thickness.

The special mix design of <u>Concrete</u> used <u>20Mpa [G20]</u> <20mmØ or <u>25Mpa [G25]</u> <20mmØ size aggregate. Where special structural elements such as post tensioned slabs or tilt up wall panels it is possible to used 10-12mmØ size aggregate. Consult the local <u>LaMaCo System Sdn Bhd + Malaysia Office (Tel: 04-771 1111)</u> Specialist Contractor for advice.

APPLICATION OF TEXTURE HARDENER (COLOR OR NON-COLOR)

Placing, Consolidating And Leveling Concrete

Deposit the concrete between previously placed. Move concrete into place with shovels. Vibrators when used shall be inserted vertically to consolidating the concrete. Immediately behind the screeding operation, the concrete is further leveled and consolidated with a bull float.

The dry shake <u>Color Hardener Texture</u> materials shall be applied at <u>3 to 4kg/m.sq</u> in most applications. Where type and severity of traffic to which the floor surface will be subjected, a heavier shake may be recommended. The heavier the application, the thicker the high strength surface mortar will be.

The shake is applied in <u>two applications</u>. <u>2/3 of the amount Color Hardener</u> <u>Texture</u> is applied and floated for the first application and the remainder for the second shake <u>1/3 of amount Color Hardener Texture</u> and floating.

The shake shall be applied by hand allowing the materials to sift through the fingers while moving the hand to obtain a uniformly thick application on the surface.

IMPRINTING THE PATTERN

While the concrete is still in the plastic stage of set, the Pattern Design Stamping Mould imprinting tools shall be applied to make the required patterned surface.

SEALING COMPOUND

Approximately 2 to 3 days of application of patterned surface, the surface shall be cleaned and shall remain dry and clean before application of one coat sealing compound.

PROTECTION

The finished floor shall be protected and heavily traffic shall be avoided for a week. The Contractor or Principal shall take necessary steps to protect the finished floor form damage by other trades.

Some design, the pattern is sealed as soon as the surface is not marred by the application.

Mixing of Proposal Ratio

Only for Concrete Imprint

Item Description		Weight	Rate	Amount	
1	Cement	0320 kg			
2	Fly ash	0050 kg			
3	Sand	0780 kg			
4	Aggregate Size: (<20mmØ)	1000 kg			
5	Water	0205 kg			
6	Additive = "D 40" WR Grace	0550 ml			
	Slump Test:	± 75mm			

COMPARISON BETWEEN CONCRETE IMPRINT SYSTEM AND INTERLOCK PAVIOR PAVING SYSTEM

CONCRETE IMPRINT	INTERLOCKING PAVIOR		
Base supported by solid concrete. Undulation will not occur.	Base supported by sand. Undulation cannot be avoided.		
The surface is composed of color non-metallic surface hardener that has certain properties the technical specification attached.	The surface is very porous due to the nature of the product.		
3. Fungus/Moss will not be able to grow as the surface is treated with non-metallic hardener and coated with sealing compound.	3. Fungus/Moss can easily grow on the surface.		
Easy maintenance with normal house-keeping.	4. Difficult to maintain/control the weeds/grass at the multiple interlocking joints of pavers.		
5. Can be up-graded by re-sealing the surface at minimum cost.	5. If up-grade is required, a new replacement is the only way out.		

TEXTURED CONCRETE IMPRINT SPECIFICATION

50MM THICKNESS- LIGHT TRAFFIC WALK WAY

SUB-BASE & FINISH SURFACE

- 1. Site preparation comprising clearing, excavation standard depth and leveling to formation and compact to receive hardcore for 250 mm depth, well compacted 20 ton vibrated machinery.
- 2. 150mm thick crusher run base, well spread 20 ton vibrated machinery and compacted including.
- 50 mm thick lean concrete
- 4. Install a layer of BRC B5, on intermediates concrete
- 5. 50mm thickness of Grade 20 design mix concrete and pocket vibrating to receive and floating by special tools smooth the surfaces. Mean time dry shake the Color Hardener with floated.

[Rate Applied of "Color Hardener" Texture 4 kg/m2]
[Color Hardener Texture is under Trade Name of "LaMaCo-Cem Floor Color GC" or "LaMaCo-Cem Floor Clor WC"]

- Once smoothing of Color Hardener Texture, dry shake of Release Wax Powder [Rate Applied of "Color Wax Release Powder" 200g/m2] [Color Wax Release Powder is under Trade Name of "LaMaCo-Release Powder Color"]
- 7. Use Pattern Design Stamping Moulding to imprint (Before concrete is cured/when the concrete is still wet).
- 8. After 2 to 5 days washing with Acid + Water for removing of Wax Release Powder, once drying apply one coat of protection "Clear Sealer" [Protected Clear Sealer is under Trade Name of "LaMaCo-Top Seal"

Sealing Compound

Approximately 2 to 5 days of application of patterned surface, the surface shall be cleaned and shall remain dry and clean before application of one coat sealing compound.

9. Note: While the area compound to large, we have to proposed Expansion & Construction Joint System to protected of Concrete Floor Crack

TEXTURED CONCRETE IMPRINT SPECIFICATION

100MM THICKNESS- MEDIUM DUTY FLOOR

SUB-BASE & FINISH SURFACE

- 1. Site preparation comprising clearing, excavation standard depth and leveling to formation and compact to receive hardcore for 300 mm depth, well compacted 20 ton vibrated machinery.
- 2. 150mm thick crusher run base, well spread 20 ton vibrated machinery and compacted including.
- 50 mm thick lean concrete
- 4. Install a layer of BRC B5 or A6 or A7, on intermediates concrete
- 5. 100mm thickness of Grade 20 design mix concrete and pocket vibrating to receive and floating by special tools smooth the surfaces. Mean time dry shake the Colour Hardener with floated.

[Rate Applied of "Color Hardener" Texture 4 kg/m2]
[Color Hardener Texture is under Trade Name of "LaMaCo-Cem Floor Color GC" or "LaMaCo-Cem Floor Clor WC"]

- Once smoothing of Color Hardener Texture, dry shake of Release Wax Powder [Rate Applied of "Color Wax Release Powder" 200g/m2] [Color Wax Release Powder is under Trade Name of "LaMaCo-Release Powder Color"]
- Use Pattern Design Stamping Moulding to imprint (Before concrete is cured/when the concrete is still wet).
- 8. After 2 to 5 days washing with Acid + Water for removing of Wax Release Powder, once drying apply one coat of protection "Clear Sealer"

 [Protected Clear Sealer is under Trade Name of "LaMaCo-Top Seal"

Sealing Compound

Approximately 2 to 5 days of application of patterned surface, the surface shall be cleaned and shall remain dry and clean before application of one coat sealing compound.

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TEXTURED CONCRETE IMPRINT SPECIFICATION

150MM THICKNESS- HEAVY DUTY FLOOR

SUB-BASE & FINISH SURFACE

- 1. Site preparation comprising clearing, excavation standard depth and leveling to formation and compact to receive hardcore for 500 mm depth, well compacted 20 ton vibrated machinery.
- 2. 300mm thick crusher run base, well spread 20 ton vibrated machinery and compacted including.
- 100 mm thick lean concrete
- 4. Install 2 layers of BRC A 10, on intermediates concrete
- 5. 150mm thickness of Grade 30 design mix concrete and pocket vibrating to receive and floating by special tools smooth the surfaces. Mean time dry shake the Colour Hardener with floated.

[Rate Applied of "Color Hardener" Texture 4 kg/m2]
[Color Hardener Texture is under Trade Name of "LaMaCo-Cem Floor Color GC" or "LaMaCo-Cem Floor Clor WC"]

- Once smoothing of Color Hardener Texture, dry shake of Release Wax Powder [Rate Applied of "Color Wax Release Powder" 200g/m2] [Color Wax Release Powder is under Trade Name of "LaMaCo-Release Powder Color"]
- 7. Use Pattern Design Stamping Moulding to imprint (Before concrete is cured/when the concrete is still wet).
- 8. After 2 to 5 days washing with Acid + Water for removing of Wax Release Powder, once drying apply one coat of protection "Clear Sealer" [Protected Clear Sealer is under Trade Name of "LaMaCo-Top Seal"

Sealing Compound

Approximately 2 to 5 days of application of patterned surface, the surface shall be cleaned and shall remain dry and clean before application of one coat sealing compound.

9. Note: While the area compound to large, we have to proposed Expansion & Construction Joint System to protected of Concrete Floor Crack



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