

# **RAZON**



# Shutter Coat SC 17000 (High performance Mould release agent)

Shuttering plywood's are generally found to work well for the initial 1-2 cycles. Thereafter it is observed that the concrete bonds to the metal or plywood and streaks of wood come off the plywood reducing its life considerably. Friction between shuttering ply surface & flowing concrete affect concrete filling leading to voids in concrete, honey combing and unsatisfactory surface finish.

Although the plywood is termite resistant, due to contact with moisture repeatedly, the termite resistance solution dissolves in water and washes away. Degradation due to ultra violet radiation accelerates further deterioration & shuttering materials life is shorted.

**Developed specially for MIVAN Aluminium Formwork**, SC 17000 is a boon at sites where MIVAN shuttering is used. It not only protects the alu-form but provides a excellent finish to the concrete surface enhancing the workmanship of the large concreting teams. SC 17000 has without fail proved to satisfy the requirements of construction firms by providing economically large coverage without compromise of surface finish of concrete.

Generally spent engine oils are sometimes used. However high pH values associated with these oils damage the wood fibers as well as binders used in manufacture of plywood, and reduce its life considerable. If spent engine oil is used, it is found adhering, to concrete surface after de shuttering. The presence of oil film on concrete surfaces makes plastering expensive & difficult.

Concrete admixtures are used extensively to increase cohesiveness of concrete & to enhance bonding properties to steel reinforcements. These concrete admixture tend to adhere to shuttering material. Hence he

shuttering material protection for increased life becomes more essential.

Razon's Shutter Coat SC 17000 is a unique formulation with neutral pH, hence does not degrade binders in plywood nor does it effect the wood fiber, in fact it protects wood fibers. So also for MIVAN, it protects alu-forms from corrosion. It has anti –fungal and antibacterial properties hence eliminates bacterial and algae fouling.

Shutter Coat SC 17000 is used for metal (aluminum, mild steel) plate also. Provides passivating film to M S/aluminum surface, enhances life of M S/aluminum plates reduces metallic oxidation & rusting.

# **Performance**

Sr. No.	Parameters	Test Method	Result
1.	Specific Gravity at 27°C	IS 1448 (P:16)	0.852 grams/cc
2.	Viscosity Index	IS 1448 (P:56)	135.4
3.	Kinematic Viscosity at $40^{0}$ C	IS 1448 (P:25)	47.28 cSt
4.	TAN	ASTM D 2896	0.1108 mgKOH/gm
5.	Flash Point	IS 1448 Part 20	243 <sup>0</sup> C
6.	Copper Strip Corrosion at 50 <sup>0</sup> C for 3 Hours	IS 1448 Part 15	Pass, No Corrosion
7.	Pour Point	IS 1448 (P:32)	Below 4 <sup>o</sup> C

Immediately after de-shuttering, scrub the shuttering board surface with wire coir, cloth. Apply Shutter Coat SC 17000 either by roller, brush or cloth swab. This procedure is better than treating shuttering material just before use. It protects shuttering ply-wood in between use cycles, and also increases its life. Or use SC 17000 for treating surfaces before concreting

# **Advantages**

- 1 Easy release and no degradation of ply or alu-form due to sticky concrete.
- 2 Protection of ply from algae and bacterial fouling.
- 3 Increase life of shuttering material by 2-3 fold.
- 4 Subsequent coatings augment earlier coating, hence ensures smooth release of shuttering form from concrete as the plywood ages.
- 5 Enhances surface finish, makes the plywood surface smooth, hence increasing UV radiation reflection.

- 6 Reduces friction between flowing concrete and aluform/ ply surfaces, hence eliminating honey combing. Gives smooth concrete finish.
- 7 Does not adhere to concrete surface after de shuttering. Hence does not interfere with plastering. Thus reduces plastering cost.

# Method of use

Stir contents in Shutter Coat SC 17000 container thoroughly. Apply coating of SC 17000 depending upon smoothness desired and roughness of shuttering material surface. For older shuttering apply generous coat of SC 17000 to obtain smooth form finish concrete, whilst for new smooth shuttering material surface lighter coat may be applied. Apply with clean roller or brush over the surface exposed to concrete. For new plywood apply on all sides.

Clean surface thoroughly with a coir-ball of used coir ropes and clean cloth prior to coating shutter Coat.

For aluminium shuttering plates stir contents thoroughly and apply one coat.

### **Product Data**

11000	1 Toute Dum			
No.	Particulars			
1.	Colour	Dark amber Fluid		
2.	Consistency	Flowable liquid		
3.	Dosage	Direct to use on shuttering surface		
4.	Corrosion	Nil. Shutter Coat SC 17000 for metal provides metal passivation &		
		increases sheet metal life tremendously.		
5.	Storage /Life	2-3 yrs if stored away from sunlight in cool dry place.		
6.	Toxicity	Nil		
7.	Coverage	Aluminium Form- 250 sq ft per Litre		
		Laminated Ply- 550 sq ft per litre		
8.	Packing	210 Litre drum		

Rev-001 Dated-01/09/2020

It is strongly recommended that site trials be conducted using site conditions and available raw materials to evaluate the product. Since site materials and conditions are beyond our control and since above suggestions and recommendations are based on our site trials and laboratory product evaluation & trials, and since methods of use at site are beyond our control. Hence, no guarantee can either be implied or enforceable. All Razon datasheets are updated on a regular basis. It is the user's responsibility to obtain the latest version.



**IANUFACTURER:** 



RAZON ENGINEERING COMPANY PRIVATE LIMITED

'Razon House',660, Taboot Street, P.O.Box No.49, Pune-411001 [India] Ph:91-20-26130791, 26132217 E-mail: razonengg@gmail.com, Website: www.razonengg.com