Rescobond Castables

Phosphate Bonded Refractory Castables



www.RescoProducts.com

Rescobond

The **RESCOBOND** family of products are phosphate-bonded, chemically setting refractory castables that are prepared for use by simply mixing with water. They develop a quick set and can be heated shortly after installation without a dryout schedule to provide a fast "back on line" capability for your application. **RESCOBOND's** chemical bonding system provides adherence to existing refractory, making it a highly effective monolithic repair and continuous lining material.

Some of **RESCOBOND's** unique properties are:

- Bonds immediately to refractory surfaces without additional anchoring
- Requires no curing period or extensive dry out
- Non-hazardous single component product. Just add water to the mixer, or at the gunning nozzle.
- Excellent physical properties for most industrial applications
- Excellent for precast shapes that require immediate usage
- Ideal for patching existing linings, or can be used for full linings
- Can be applied to hot surfaces
- Gunning Grades can be gunned with Standard Gunning equipment
- Available in both Dense and Insulating grades

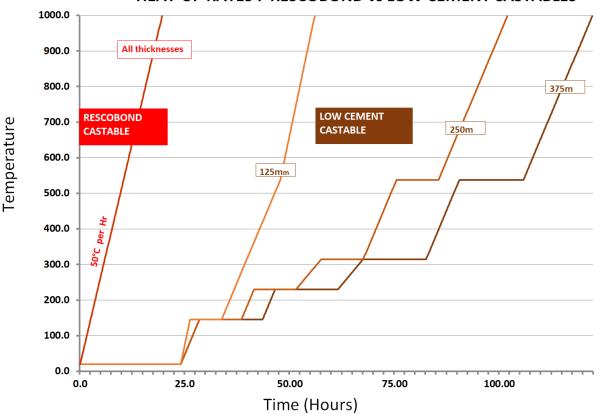




The **RESCOBOND** product range includes the world renowned AA-22S. Since it was first developed and Patented in 1956, it has been the Petrochemical Industries standard in erosion resistant castables for cyclone, and other highly erosive areas.

Rescobond AA-22S Rescobond mAAx Rescobond 70F Rescobond 3000 Rescobond 3000G Rescobond 70A **Rescobond** 90 Rescobond 90G Rescobond 3000A **Rescobond 3000AG Rescobond 90A Rescobond 90AG Rescobond 70AG Rescobond 3**

The graph below compares dry-out schedules of Rescobond castables compared with conventional low cement castables.



HEAT-UP RATES : RESCOBOND vs LOW CEMENT CASTABLES

Time (Hours)

Typical Time savings for various lining designs employing low cement castables are summarized below. (Examples based on drying to 1000°C);

	Low Cement Castable Dry-out time	Rescobond Dry-out time	Saving
125mm Thick Lining	56 hrs	20 hrs	36 hrs
250 mm Thick Lining	102 hrs	20 hrs	82 hrs
375mm Thick Lining	122 hrs	20 hrs	102 hrs

The above dry-out recommendations applies to all Rescobond products apart from Rescobond mAAx, Rescobond AA-22S & Rescobond 70F. Units lined with these products do not require drying or heating prior to unit start up unless the following conditions apply;

- It will be used in a wet operating environment
- It will be subjected to hydrostatic testing
- It is installed greater than 50mm thick

Rescobond Castables

				815°C Reheat Properties				Chemistry		
Product	Install	Service	Bulk	Cold Crush	Erosion loss	Permanent	Al ₂ 0 ₃	SiO2	Fe ₂ O ₃	
Name	Method	Temp	Density	Strength	(ASTM C704)	Linear Change				
		°C	Kg/m ³	Kg/cm ²	cc	Gr-815°C (%)	%	%	%	
Extreme Erosion	Extreme Erosion Resistance Service									
Rescobond 17G	Handpack/Ram	1650	130	>315	<14	-0.02	56.3	31.4	0.9	
Rescobond 17HP	Handpack/Ram	1510	127	>700	>10	-0.3 to 0.0	46.5	41.9	0.9	
Rescobond AA-22S		1427	2688	>1120	<3.5	0.0 to -0.4	73.6	12.9	1.0	
Rescobond mAAx	Handpack/Ram	1427	2688	>1120	<3	0.0 to -0.4	80.0	7.0	0.9	
Rescobond 70F	Handpack/Ram	1427	2643	>704	<5	0.0 to -0.4	73.6	12.9	1.0	
Aluminium Conta	act Service									
Rescobond 3000A	Vibration cast/Ram	1650	2352	>350	<12	0.0 to -0.4	55.1	32.6	0.8	
Rescobond 3000A0	Gunning/Handpack	1650	2240	>315	<15	0.0 to -0.4	50.6	35.8	1.1	
Rescobond 70A	Vibration cast/Ram	1650	2528	>560	<6	0.0 to -0.4	69.3	19.9	1.2	
Rescobond 70AG	Gunning/Handpack	1650	2080	>175	<15	0.0 to -0.4	67.8	17.4	0.3	
Rescobond 90A	Vibration cast/Ram	1760	2725	>420	<10	0.0 to -0.4	88.5	0.3	0.1	
Rescobond 90AG	Gunning/Handpack	1760	2816	>350	<10	0.0 to -0.4	87.1	2.2	0.2	
General Service										
Rescobond 3000	Vibration cast/Ram	1650	2352	>560	<12	0.0 to -0.4	55.1	32.6	0.8	
Rescobond 3000G	Gunning/Handpack	1650	2080	>315	<12	0.0 to -0.4	59.9	28.0	0.8	
Rescobond 90	Vibration cast/Ram	1760	2755	>490	<8	0.0 to -0.4	92.6	0.1	0.1	
Insulating Service										
Rescobond 3	Gunning / Casting	1300	1040	>49	NA	-0.2 to -0.7	19.9	55.2	1.7	

Notes: - To develop full bond strength Rescobond products must be heated to 370°C Minimum

- For all products suffixed "G", the data shown is based on gunned specimens

- Gun grades should not be pre-dampened and/or aged prior to loading into the gun

-*Rescobond 70F is a fine grained (<1mm) version of AA-22S designed specifically for veneer pate of worn refractory lined hex cells

The properties shown in this brochure represent typical average results generated using standard ASTM test methods (unless otherwise n

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Rescobond 3

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