



Best Practices for Storing RESKO Monolithics

General Guidelines for Ideal Storage Conditions

- 1) Refractory monolithics (dry castables and gun mixes, basic castables and gun mixes, plastics, wet and dry mortars, liquid seals, precast shapes) should be stored in a dry, covered, weather-protected location, such as a permanent warehouse, and placed on a concrete slab, asphalt pad, or other impermeable surface. The product should be stored on the original pallets (with stretch wrap or original packaging intact, when applicable) but elevated from the surface to allow air circulation. Care should be taken to avoid high humidity locations where moisture can collect under the plastic pallet wrapping.
- 2) Refractory monolithics should **NOT** be stored on grass, soil, or other non-compacted surface or any area where moisture can collect, stand, or come in contact with the refractory or refractory packaging.
- 3) Refractory bags or containers showing evidence of damage, or being previously opened, should not be used and should be discarded. Bags containing dry refractory that is agglomerated, containing hard lumps, or have evidence of water stains should not be used and should be discarded. Hard lumps indicate that the dry refractory has come into contact and reacted with water.
- 4) Ideal air and material temperature range during storage is 50°F (10°C) to 80°F (27°C) for all refractory monolithic products.

Guidelines for DRY Monolithic Refractories

(Dry Castables and Gun mixes, Basic Castables and Gun Mixes, Dry Mortars)

- 5) Dry monolithic products should be stored in unopened bags or containers and on the original shipping pallets. Bags or containers showing evidence of damage or being previously opened should NOT be used and should be discarded. Bags containing dry refractory that is agglomerated, containing hard lumps, or that have evidence of water stains should NOT be used and should be discarded. Hard lumps in the bag indicate that the dry monolithic refractory has come into contact with moisture.
- 6) If exposed to freezing temperatures during storage, dry monolithic products should be heated to a temperature between 50°F (10°C) and 80°F (27°C) prior to installation for best results. Measure material temperature for best results. An immersion thermometer is a good method to measure the refractory monolithic temperature.
- 7) In hot weather conditions, dry monolithic products should be placed in shady, cool areas; out of direct sunlight. Measure material temperature for best results. Refrigerated truck vans have been successfully used to cool dry monolithics to within the ideal temperature range prior to installation.



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Guidelines for WET Mortars and Plastics

(Air Setting, Phosphate Bonded)

- 8) Wet mortars and plastics can be affected by storage temperatures more than that of dry monolithic products and should be stored at temperatures between 40°F (4°C) and 80°F (27°C) to minimize premature hardening of the product. Long term storage at hot temperatures can, prematurely, accelerate the wet product's dryout, setting and, subsequently, hardening.
- 9) Do not store wet mortars and plastics close to high heat sources, such as operating furnaces.
- 10) In cold / freezing air temperatures, wet mortars and plastics should be stored in a heated area prior to use. Winterized wet mortars should be considered for winter conditions. Winterized wet mortars have depressed freezing points but can still freeze if the air temperatures becomes very low.
- 11) For wet mortars, some product separation and settling might occur during long term storage. Evidence of this separation and settling would be a thin liquid layer on the top of the mortar when the containers is first opened. If this liquid layer is noticed, mix the liquid back into the mortar prior to use. The preferred method for mixing is a "paint-type" mixer attached to a power drill.

Guidelines for Liquid Coatings and Seals

(Air Setting, Phosphate Bonded)

- 12) The preferred method for storing liquid coating and seals is in air temperatures ranging from 40°F (4°C) TO 80°F (27°C) in the original packaging.
- 13) Liquid coating and seals can be negatively affected by cold storage temperatures. In cold or freezing air temperature, liquid coatings and seals should be stored in a heated area prior to use. Winterized versions of liquid coating and seals, with lower freezing points, are available but can still freeze if air temperatures are extremely cold. If regular liquid coatings or seals are exposed to freezing temperatures during storage, a gel phase might develop. The liquid product can be reconstituted if the liquid is thawed and vigorously mixed.
- 14) In hot weather conditions, liquid coatings and seals should be stored in cool, shaded areas prior to use. Hot air temperatures can promote dehydration and a surface "skin" might form.
- 15) Liquid coatings and seals should be stirred prior to use, especially if the product has been in storage for a period of time.



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Guidelines for Precast Shapes

(Cement Bonded; Dried)

- 16) The preferred method for storing precast shapes is in a dry, covered, weather-protected location such as a permanent warehouse in a minimum air temperatures of 40°F (4°C) on the original packaging.
- 17) Refractory precast shapes should **NOT** be stored on grass, soil, or other non-compacted surface or any area where moisture can collect, stand, or come in contact with the refractory precast shapes or packaging.



Best Practices for Storing RESCO Monolithics

| DENSE CASTABLES and GUN MIXES | Suggested Shelf Life | DENSE CASTABLES and GUN MIXES | Suggested Shelf Life |
|-------------------------------|----------------------|-------------------------------|----------------------|
| All EZ CUBED Castables | 12 months | QUIKTURN 45PC, 60, 60PC, 60SF | 12 months |
| All EZ CAST Castables | 12 months | QUIKTURN 32-70, 32-70PC | 12 months |
| | | QUIKTURN 45PCA, 65PCA | 12 months |
| FURNACON 70, 95 | 12 months | QUIKTURN 45G, 60G | 12 months |
| FURNACUBED 40, 65, 70 | 12 months | QUIKTURN 30SC PC | 12 months |
| FURNACUBED 70QT, 85QT | 12 months | QUIKTURN 56SCPC, 56SCG | 12 months |
| FURNACUBED R-MAX | 12 months | QUIKTURN AZS PC, AZS G | 12 months |
| FURNACUBED FS | 12 months | QUIKTURN FS PC | 12 months |
| | | | |
| HI STRENGTH 25, 26LI, 28LI | 12 months | R-MAX C, SF, PC, PC QT | 12 months |
| | | R-MAX 85, 85Z | 12 months |
| HM 28 LI, HM 28LIF, 28LICO | 12 months | R-MAX MP | 12 months |
| HM70, 70DS | 12 months | R-MAX AZS PC QT | 12 months |
| | | R-MAX ZG, Z PC QT | 12 months |
| KRICON 28, 30, 32, 32-70, 34 | 12 months | | |
| KRICON 34-5, 34-10 | 12 months | RESCOGUN 60DB | 12 months |
| | | | |
| LADLELINE | 12 months | RESCOCAST 15, 15GM, 15HT | 12 months |
| | | RESCOCAST 17 | 12 months |
| MONO GUN 90 | 12 months | RESCOCAST 17AC, 17ACS | 12 months |
| | | RESCOCAS 17AG gun mix | 12 months |
| PACOCAST 24T | 12 months | | |
| | | All UNICRETE castables | 12 months |
| PACOCAST 28LI, 28LI-CG | 12 months | | |
| | | VIBROCAST 2800, 3000 | 12 months |
| PERMACON 95 | 12 months | VIBROCAST 50, 50PC | 12 months |
| | | VIBROCAST 60, 60PC | 12 months |
| PROGUN 26LI, 28LI, 30 | 12 months | VIBROCAST 70M, 75 | 12 months |
| PROGUN LC Gun Mixes | 12 months | VIBROCAST EZ80, 85ULM | 12 months |
| | | VIBROCAST 7LT PC | 12 months |
| PROCAST 80 | 12 months | VIBROCAST ASC 8LTC | 12 months |
| | | VIBROCAST ASC 8LT CC | 12 months |
| PUROTAB, PUROTAB CRSE | 12 months | VIBROCAST 56SC, 80SC | 12 months |
| | | VIBROCAST FS6 | 12 months |
| PUROCAST N | 12 months | | |
| | | | |
| PYROCAST 3000C, ARC | 12 months | | |
| PYROCAST FPM | 12 months | | |
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| INSULATING CASTABLES and GUN MIXES | Suggested Shelf Life | INSULATING CASTABLES and GUN MIXES | Suggested Shelf Life |
|--|-------------------------|---------------------------------------|-------------------------|
| RESCOCAST 3-20R | 12 months | QUIKLITE 3-35P, 3-35PC | 12 months |
| RESCOCAST 3-35, 3-35P | 12 months | QUIKLITE 3-DS | 12 months |
| RESCOCAST 3-35 PC | 12 months | QUIKLITE 3A-DS, 3E-DS | 12 months |
| RESCOCAST 3B | 12 months | QUIKLITE 3PC | 12 months |
| RESCOCAST 3, 3A, 3E, 3PC | 12 months | QUIKLITE 4LI | 12 months |
| RESCOCAST 4LI | 12 months | QUIKLITE 6, 6PC | 12 months |
| RESCOCAST 6, 6PC | 12 months | QUIKLITE 7-DS, 8-DS, 8PC | 12 months |
| RESCOCAST 7 | 12 months | QUIKLITE 9LI-DS | 12 months |
| RESCOCAST 8, 8PC | 12 months | QUIKLITE 30 | 12 months |
| RESCOCAST 9, 9LI, 9LIPC | 12 months | | |
| PUROLITE 30 | 12 months | | |
| LHV-124 | 12 months | | |
| RS-3005-NS castable | 12 months | | |
| KC MIX Castable | 12 months | | |
| CASTABLE #16 | 12 months | | |
| INDUCTOCAST 30 | 12 months | | |
| RESCOLITE 23-50LI | 12 months | | |
| RESCOLITE 24-60, 24-75 | 12 months | | |
| RESCOLITE 28-95PC | 12 months | | |
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| LIQUID BINDERS SHOTCRETE ACTIVATORS | Suggested Shelf Life |
|---|---------------------------------|
| EZ ADD Liquid binder* | 12 months |
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| RESCO SC-1 Activator* | 12 months |
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| (*) = When transported and/or stored, product should not be exposed to freezing temperatures. | |

| EXTRUDED PLASTICS (Phosphate Bonded, Air Setting) | Suggested Shelf Life |
|--|---------------------------------|
| CORLINE | 6 months |
| CORPATCH 50MS | 4 months |
| CORPATCH 80, 80MS | 6 months |
| | |
| RESCO LR | 6 months |
| | |
| REF PATCH 850FG, X-13 | 3 months |
| REF RAM 850HS-FG, 850LS | 3 months |
| REF RAM 877F, 870FG-M | 3 months |
| | |
| RESCORAM 60, 70 BLUE, 70, 85, 85S, 90 | 3 months |
| | |
| RESCORAM 7CR, 10CR, 20CR | 3 months |
| | |
| RESCORAM 70SC | 3 months |
| | |
| RESCORAM A45HC, A60, A80, A90 | 3 months |
| | |
| RESCO TAPPERS CLAY | 3 months |



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| LIQUIDS / SEALS | TYPE | Suggested Shelf Life |
|----------------------------|-------------|-----------------------------|
| POT COAT, POT COAT A / S | Liquid | 2 months |
| SLURRY COAT, SLURRY COAT A | Liquid | 2 months |
| JAMB COAT P 99 | Liquid | 12 months |
| JAMB COAT P DRY | Dry Powder | 12 months |
| JAMB COAT PC DRY | Dry Powder | 12 months |
| JAMB COAT PCE DRY | Dry Powder | 12 months |
| JAMB COAT FS PB DRY | Dry Powder | 12 months |
| DOOR SEAL | Liquid | 2 months |
| LID SEAL, LID SEAL EG | Liquid | 2 months |
| RESCOCOAT G | Liquid | 2 months |

| DRY VIBRATABLES | Suggested Shelf Life |
|-------------------------|-----------------------------|
| R-50-DV | 12 months |
| R-60-DV | 12 months |
| R-70-DV | 12 months |
| R-85-DV | 12 months |
| R-85-DV Extra Sintering | 12 months |



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| BASIC CASTABLES, RAM MIXES and GUN MIXES | Suggested Shelf Life | DRY BASIC MORTARS | Suggested Shelf Life |
|---|---------------------------------|--------------------------|---------------------------------|
| CP-40 castable | 6 months | DOL-MORTAR-D dolomite | 6 months |
| | | DOL-MORTAR-T dolomite | 6 months |
| DOL-MIX-R+ dolomite ram | 4 months | | |
| DOL-MIX-R50+ dolomite ram | 4 months | GRFG MORTAR | 6 months |
| DOL-MIX-BL dolomite ram | 4 months | | |
| DOL-MIX-P dolomite ram | 4 months | LARCOBOND | 6 months |
| | | LARCOBOND AS | 6 months |
| PERMACAST FG-GM / DS | 6 months | | |
| PERMACAST FG / FG-HS | 6 months | PERMANENTE MORTAR | 9 months |
| PERMACAST FG RAM-CAST | 6 months | | |
| | | RESCOSET CHROME MORTAR | 6 months |
| PERMAGUN S-II gun mix | 6 months | | |
| PERMAGUN 165 AF gun mix | 6 months | | |
| | | | |
| PERMANENTE 165 AF | 6 months | | |
| PERMANENTE 165 AF Ram Cast | 6 months | | |
| | | | |
| PERMANENTE 98AF | 6 months | | |
| | | | |
| RESCOMAG FG PC pumpable | 6 months | | |
| RESCOMAG 90PC pumpable | 6 months | | |
| | | | |
| RESCOMAG MIX | 12 months | | |
| | | | |
| DENSPAK ram mix | 3 months | | |
| DENSPAK O ram mix | 3 months | | |
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| ALUMINA-SILICA MORTARS (WET and DRY) | Description | Suggested Shelf Life |
|---|-----------------------|---------------------------------|
| ADAPHOS 85 | Wet, Phos-Bonded | 3 months |
| ADACOR 70, 80 TROWEL | Wet, Air Setting | 3 months |
| ADAMANT X | Wet, Air Setting | 3 months |
| ADAMANT AIR SET (DRY) | Dry, Air Setting | 9 months |
| SUPER ADAMANT | Wet, Air Setting | 3 months |
| ALUTAB | Dry, Air Setting | 3 months |
| FIFTY FIFTY mortar | Dry, Heat-Setting | 18 months |
| LADLELOCK 3000 mortars | Wet, Air Setting | 4 months |
| LADLELOCK 50S, 70, 80, 85 mortars | Wet, Air Setting | 4 months |
| LADLELOCK 85PB, 90PB, 90PBP mortars | Wet, Phos-Bonded | 4 months |
| LO SET mortar | Dry, Air Setting | 6 months |
| METALDAM mortar | Dry, Heat Setting | 18 months |
| RESCOSET 10CR mortar | Wet, Phos-Bonded | 3 months |
| RESCOSET 50M, MD, 3000 mortars | Wet, Air Setting | 3 months |
| RESCOSET 90P, 80P mortars | Wet, Phos-Bonded | 3 months |
| SPRAY MIX S-506 | Wet, Air Setting | 3 months |
| ST-001 PATCH MIX | Wet, Air Setting | 4 months |
| SUPER GROUT 85 | Wet, Air Setting | 4 months |
| SEAL TITE GROUT | Wet, Air Setting | 4 months |
| REF BOND SPRAY MIX | Wet, Phosphate bonded | 3 months |
| REF BOND SPRAY MIX STIFF | Wet, Phosphate bonded | 3 months |
| TROWELEZE mortar | Wet, Air Setting | 3 months |
| PACO Firebrick Mortar | Dry, Heat-Setting | 18 months |
| PACO Firebrick Mortar #1 | Dry, Heat-Setting | 18 months |
| PACO SD Laying Mix | Dry, Air-Setting | 6 months |
| PACO Coating Mix | Dry, Air-Setting | 6 months |



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| BASIC CASTABLES – RAM MIXES | Suggested Shelf Life |
|------------------------------------|-----------------------------|
| | |
| CP-40 castable | 6 months |
| | |
| DOL-MIX-R+ dolomite ram mix | 4 months |
| DOL-MIX-R50+ dolomite ram mix | 4 months |
| DOL-MIX-BL dolomite ram mix | 4 months |
| DOL-MIX-P dolomite ram mix | 4 months |
| | |
| PERMACAST FG-GM / DS gun mixes | 6 months |
| PERMACAST FG / FG-HS castables | 6 months |
| PERMACAST FG RAM-CAST | 6 months |
| | |
| PERMAGUN S-II gun mix | 6 months |
| PERMAGUN 165 AF gun mix | 6 months |
| | |
| PERMANENTE 165 AF castable | 6 months |
| PERMANENTE 165 AF RAM CAST | 6 months |
| | |
| PERMANENTE 98AF | 6 months |
| | |
| RESCOMAG FG PC pumpable | 6 months |
| RESCOMAG 90PC pumpable | 6 months |
| | |
| RESCOMAG MIX | 12 months |
| | |
| DENSPAK ram mix | 3 months |
| DENSPAK O ram mix | 3 months |

Dated: 3/16/2020