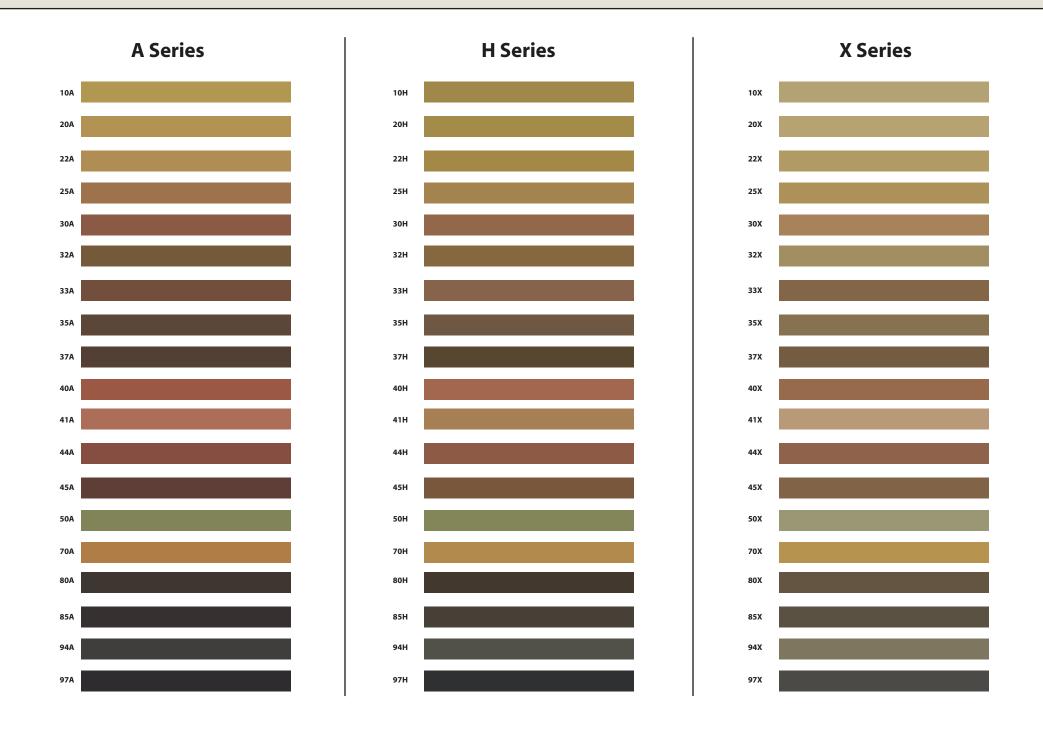


# **Concentrated Mortar Color**



Tech DA

# CONCENTRATED MORTAR COLORS





# **TechDATA • Masonry Mortar 04060**

# **PART 1. GENERAL**

### 1.01 DESCRIPTION

**A. General:** Provide Mortar color in accordance with Architect's directions.

# 1.02 QUALITY ASSURANCE

- A. Design Criteria: The compressive strength of mortar with pigment added shall be Type (S) (M) (N) or (O).
- B. Job Mock-up: Construct on the jobsite a mock-up panel 4' by 3'. Mock-up shall represent the final work in material and finish. Leave the accepted mock-up in place until the work is completed and accepted.

#### 1.03 SUBMITTALS

- A. Samples: Submit samples of colors to architect for selection prior to building a job mock-up panel.
- **B. Test Reports:** Submit certified test reports showing compliance with compressive strength with pigment added meeting standards set forth in ASTM designation C270, Type (M,N,S,O,K).

### 1.04 QUALITY ASSURANCE

A. Concentrated mortar shall be finely milled minus 325 mesh, 90% pure inorganic iron oxides. Carbon added for darker shades shall not exceed 4%. Color pigments shall be light fast, weather resistant, alkali resistant, water soluble, lime proof, free of deleterious filler and extenders.

### 1.05 PRODUCT DELIVERY, STORAGE & HANDLING

A. Deliver mortar color to jobsite in sealed unit bags. Identify each package with material name and color product number.

# **PART 2. PRODUCTS**

#### 2.01 MATERIALS

A. Mortar color shall be 90% pure mineral oxide without fillers or extenders as manufactured by Solomon Grind-Chem Service. SGS Concentrated Mortar Colors surpass the pigment requirements set forth by ASTM C979.

# **PART 3. EXECUTION**

#### 3.01 MIXING

A. Mixing Procedure: A mechanical mixer should be used and sufficient mortar should be mixed at one time which can be used within a two hour period. To provide uniform color and workability, a sound method is to load the mixer as follow: (1) Load 3/4 amount of water. (2) Load 1/3 amount of sand. (3) Add masonry cement or portland and lime mixture. (4) Add the appropriate number of SBS color units to the mortar mix. (5) Slowly add balance of sand and water, running machine for 5 minutes or more until a uniform color and desired workability is achieved.

The exterior mortar joints should be tooled and care should be taken not to overtool the mortar joints which may darken the appearance of the mortar joint. Water consistency should be maintained throughout the job. The more water the lighter the color. Retempering of colored mortar with the addition of water should not be allowed.

- B. Cleaning: Never use acid. Use a "proprietary cleaner" following the directions for the weakest solution recommended by the manufacturer.
- C. Protection: To inhibit efflorescence keep masonry work covered and protected during construction.

(continued on back)



E	P:::	S
Equipment	Products	Solomon

- 1251 West Durst Drive, Rialto, CA 92376, PH: 866-747-2656
- www.solomoncolors.com

# Tech DATA

TABLE 1 SOLOMON COLOR UNITS REQUIRED FOR SPECIFICATION MORTAR MIXES			
ASTM C270 Specification for Mortar Unit Masonry C270 includes the following mortars:	Number of Solomo "A" Series Color	n Color Units to be ad "H" Series Color	ded with mortar mix "X" Series Color
Prepared masonry cements, ASTM C91, Types N, S, or M: One 70-80 lb (32-36 kg) bag masonry cement ASTM C91, Type 1; 3 cu ft (.08 m³) sand, ASTM C144	One A Unit	One H Unit	One X Unit
Portland cement/lime mortars, Type N, 750 psi (5168 kPa): One 94 lb (43 kg) bag portland cement, ASTM C150; One 50 lb (23 kg) bag hydrated lime, ASTM C207; 6 cu ft. (.17 m³) sand, ASTM C144	Two A Units	Two H Units	Two X Units
Portland cement/lime mortars, Type S, 1800 psi (12,400 kPa): Two 94 lb (43 kg) bags portland cement, ASTM C150; One 50 lb (23 kg) bag hydrated lime, ASTM C207; 9 cu ft. (.25 m³) sand, ASTM C144; or	Three A Units	Three H Units	Three X Units
Portland cement/lime mortars, Type S, 1800 psi (12,400 kPa): One 94 lb (43 kg) bag portland cement, ASTM C150; Two 70 lb (32 kg) bags masonry cement Type 1, ASTM C91; 9 cu ft. (.25 m³) sand, ASTM C144	Three A Units	Three H Units	Three X Units
Portland cement/lime mortars, Type M, 2500 psi (17,225 kPa): Two 94 lb (43 kg) bags portland cement, ASTM C150; One 25 lb (11 kg) bag hydrated lime, ASTM C207; 6 cu ft. (.17 m³) sand, ASTM C144; or	Three A Units	Three H Units	Three X Units
Portland cement/lime mortars, Type M, 2500 psi (17,225 kPa): One 94 lb (43 kg) bag portland cement, ASTM C150; One 70 lb (32 kg) bag masonry cement Type 1, ASTM C91; 6 cu ft. (.17 m³) sand, ASTM C144	Two A Units	Two H Units	Two X Units
Portland cement/lime mortars, Type O, 350 psi (2412 kPA): One 94 lb (43 kg) bag portland cement, ASTM C150; Two 50 lb (23 kg) bags hydrated lime, ASTM C207; 9 cu ft (.25 m³) sand, ASTM C144	Three A Units	Three H Units	Three X Units



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# **CONCENTRATED MORTAR COLOR**





# Material Safety Data Sheet

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I. PKO	DUCI	IDENTIF	ICATION

PRODUCT NAME	Solomon Colors Concentrated Mortar Color
CHEMICAL FAMILY	Inorganic Metal Oxide,
	Carbon Blend
CAS NUMBER	1309-37-1, 1333-86-4
DOT CLASS	Not regulated
CHEMICAL FORMULA	Blends of Fe <sub>2</sub> O <sub>3</sub> , Fe <sub>3</sub> O <sub>4</sub> ,
	$Fe_2O_3 \bullet H_2O$ , and/or C

# **II. INGREDIENTS**

<u>COMPONENTS</u>	<u>COMPONENTS</u>	<u>%</u>	OSHA-PEL	ACGIH-TLV
Iron (III) Oxide (dust)	$Fe_2O_3 \bullet H_2O, Fe_3O_4$	100%	None Est.	None Est.
No. 80, 85, 97	$Fe_2^2O_3$	proprietary	None Est.	None Est.
	$Fe_3^2O_4$		None Est.	None Est.
	C		$3.5 \text{ mg/m}^3$	$3.5 \text{ mg/m}^3$

# III. PHYSICAL DATA

APPEARANCE	Fine, dry powder
COLOR	Buff, Red, Brown, or Black
ODOR	None
MELT POINT/FREEZE POINT	Not applicable
MELT POINT/FREEZE POINT	Not applicable
VAPOR PRESSURE	Not applicable
SPECIFIC GRAVITY	4 to 5
BULK DENSITY	55-80 lbs. per cubic ft.
SOLUBILITY IN WATER	
% VOLATILE BY VOLUME	Nil

# IV. FIRE AND EXPLOSION DATA

FLASH POINT °F (°C)	Not applicable
IGNITION TEMPERÁTURE (°C)	Not applicable
EXTINGUISHING MEDIA	
SPECIAL FIRE FIGHTING PROCEDURES	None
UNUSUAL FIRE & EXPLOSIVE HAZARDS	

# FOR COLOR NOS. 80, 85, 97

FLASH POINT °F (°C)	Not applicable
IGNITION TEMPERATURE (°C)	500 to 700 in air
EXTINGUISHING MEDIA	Water
SPECIAL FIRE FIGHTING PROCEDURES	Normal fog or noz

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# UN

PECIAL FIRE FIGHTING PROCEDURES	Normal fog or nozzle jet application
	of water and/or exclusion of air.
NUSUAL FIRE & EXPLOSIVE HAZARDS	Burning carbon black can produce carbon
	monoxide and sulfur dioxides. Use a
	NIOSH approved respirator for protection
	from possible exposure during a fire.
	Exercise caution as it may not be obvious
	that it is burning unless stirred and sparks
	are present.

STABILITY	Stable
INCOMPATIBILITY	None
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS	Carbon may form carbon monoxide,
	carbon dioxide or sulfur oxides if present.
HAZARDOUS POLYMERIZATION	Will not polymerize
CONDITION TO AVOID	Strong acids such as hydrochloric,
	hydroflouric, etc. Excessive heat and
	strong oxidizers such as chlorates,
	bromates or nitrates.



