



# MasterFlow 648

# High Strength, High Flow Epoxy Grout

MasterFlow 648 is the premier epoxy resin-based precision grout with carefully balanced physical properties used to secure critical equipment for proper alignment and transmission of static and dynamic loads.

#### **Features:**

- High Compressive Strength and Effective Bearing Area
- Excellent resistance to
  - Vibration and rotational torque
  - Creep
  - Chemical attack
  - Elevated service temperatures
- Formulated for easy installation
  - Excellent flow characteristics
  - Suitable for pouring or pumping
  - Low dust generation
  - Soap and water cleanup

MasterFlow 648 is available in all regions of the world, supported by trained BASF Construction Chemicals sales and technical personnel on every continent.









Please do not hesitate to contact us for more specific information!

www.masterflow-648.basf.com ■ 1-800-433-9517



#### Select technical data

## Compressive Strength, ASTM C 579, Method B Ultimate Compressive Strength, psi (MPa)

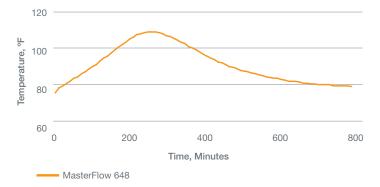
Fill Ratio	7 Day Ambient	Post Cured*
Four Bag Mix	14,500 (100)	16,000 (110)
Three Bag Mix	14,000 (96)	15,000 (103)

<sup>\*</sup>Cured 24 hours at room temperature, post cured 16 hours at 140 °F, and conditioned 24 hours at test temperature.

## **Cure Rate/Compressive Strength,** psi (MPa), when cured at: (four bag mix)

Time	50°F (10°C)	73°F (23°C)	95°F (35°C)
16 hours	_	7,500 (52)	8,500 (59)
1 Day	1,400 (10)	9,000 (62)	13,500 (93)
2 Days	9,000 (62)	12,500 (86)	14,000 (96)
3 Days	12,000 (83)	13,500 (93)	14,500 (100)
4 Days	13,500 (93)	14,500 (100)	15,000 (103)

#### **Peak Exotherm**



#### Flow Times and Bearing Area,

ASTM C1339 (four bag mix)

Depth of pour	Back of Box	Full Plate Contact	Bearing Area
1" Clearance	11 Minutes	13 Minutes	High (>85 %)
2" Clearance	4 Minutes 50 Seconds	5 Minutes	High (>85 %)

### Coefficient of Thermal Expansion, ASTM C 531

73-210°F (23-99°C), in/in/° F (cm/cm/°C)

Four Bag Mix  $1.8 \times 10^{-5} (3.22 \times 10^{-5})$ Three Bag Mix  $2.0 \times 10^{-5} (3.6 \times 10^{-5})$ 

Shrinkage, ASTM C 531, unrestrained; linear, %

Four Bag Mix 0.014 Three Bag Mix 0.031

**Creep,** ASTM C 1181, in/in 600 psi, 140°F (4.1 MPa, 60°C) @ 28 Days

Four Bag Mix  $4.2 \times 10^{-3}$ Three Bag Mix  $4.9 \times 10^{-3}$ 









### BASF Corporation Construction Systems

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