

BRISTAR for large hole

1. Kinds of Bristar for large hole

Kinds	Hole Diameter (mm)	Temperature of materials to be demolished		Temperature of Bristar for large hole	Temperature of water
		Applicable range	Possibility of Blown-out shots		
100C	50 – 68mm (2 – 2.7")	15 – 35°C (59 – 95° F)	35°C (95° F)	max.35°C (95° F)	max.30°C (86° F)
150C		10 – 20°C (50 – 68° F)	20°C (68° F)	max.20°C (68° F)	max.15°C (59° F)
200C		5 – 15°C (41 – 59° F)	15°C (59° F)	max.15°C (59° F)	max.10°C (50° F)
300C*		-5 – 5°C (23 – 41° F)	5°C (41° F)	max.5°C (41° F)	max.5°C (41° F)

* Bristar 300C is a product specially made to order.

2. Conditions to use Bristar for large hole

- 1) Hole diameter : 50 – 68mm (2 – 2.7 inches)
- 2) Water quantity for mixing : 30 % to Bristar for large hole
(6 liters(1.6 US Gallon) for 20kg of Bristar for large hole)
- 3) Mixing time : Max. 2 minutes
- 4) Allowable time for poring : Max. 10 minutes after mixing

3. Required quantity of Bristar for large hole (per 1 meter in length)

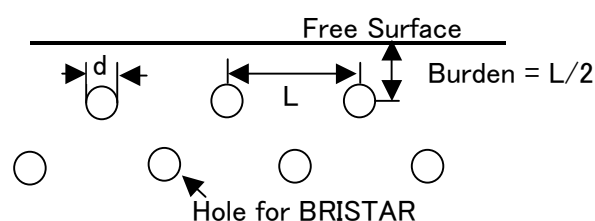
Hole Diameter (mm)	50	52	62	68
Bristar for large hole (kg/meter)	3.2	3.5	4.9	5.9

4. Hole spacing

1)The approximate hole spacing should be decided according to the following formula,

$$L = K d \quad (\text{Formula for hole spacing})$$

L : hole spacing (cm) K : demolition coefficient d : hole diameter (cm)



2) Demolition coefficient : K

Demolition coefficient : K K value varies with the properties of rock, conditions of free surface and joints, and the quantity of re-bars.

●K value for Rock

Kinds of Rocks	Standard K value
Soft Rock	10 ~ 15
Medium Rock	8 ~ 12
Hard Rock	Less than 10

In case of demolition of materials with one free surface such as trenching etc., K value is smaller than the above ones.

●K value for Concrete

Kinds of Concrete	Standard K value	Quantity of re-bar (kg/m ³)
Plain Concrete	10 ~ 15	0 ~ 30
Reinforced Concrete	8 ~ 10	30 ~ 60
	6 ~ 8	60 ~ 100
	5 ~ 6	More than 100

In case it is required materials should be demolished to smaller pieces, K value is smaller than the above ones.

5. How to use

1) Mixing

Mix Bristar for large hole uniformly and thoroughly with 6 liters(1.6 US Gallon) of water per 20kgs(44 lb.) of Bristar for large hole with a mechanical mixer.

Avoid diluting Bristar for large hole by re-mixing with water once the fluidity is gone.

2) Filling

Pour the mixture of Bristar for large hole and water into holes within 10 minutes.

3) Curing

The holes filled with Bristar for large hole should be successively covered with sheets.

4) Storage

Store Bristar for large hole in a dry place. If a part of it is used, push the air out of the bag and seal it with tape. Use it as soon as possible.