



Moulding plaster for ceramic press forms

Advantages

- High absorption capacity
- Outstanding surface hardness
- Minimal expansion
- Consistent quality

Characteristics

Appearance	white powder
Mixing ratio	
powder : water	2.7-3.0 kg per litre
Strewing and mixing time	10 min
Working time	app. 15 min
Final setting time	app. 25 min
Surface hardness	more than 200 N/mm ²

Important

- **AS-DUR AB 40** and the water to be mixed shall have a temperature of approx. 20° C. Plaster which has been stored at extreme temperatures should be acclimatised for several hours before use.
- The mixing equipment must be clean. Any contamination will affect the quality properties of the form.

Working instructions

The mixing ratio can be varied in the above-mentioned range according to the clay body. The higher plaster ratio to water results in optimal hardness and less absorption capacity - with the reduced plaster to water ratio less hardness and more absorption capacity is reached.

a) Mixing

Strew **AS-DUR AB 40** in the given ratio into the water. Use a mixer equipped with a propeller blade, which run at approx. 300 rpm. We recommend mixing under vacuum to avoid air bubbles.

After the working time of 15 min. the mix is not allowed to be agitated any longer because disturbance of the crystallization process may result in considerable solidity loss which may cause fissuring of the plaster mould. To make press forms of good quality it is necessary to pay attention to the following timetable:

- | | |
|---------------------------------------|----------------|
| 1. Strewing of plaster into the water | app. 1 - 2 min |
| 2. Soaking time | approx. 1 min |
| 3. Mixing time with mechanical mixer | 7 - 8 min |
| 4. Total working time | app. 15 min |
| 5. Final setting time | app. 25 min |

b) Purging

Volume and size of the pores are dependent on the beginning of purging. Total porosity is determined by the mixing ratio **AS-DUR AB 40**: water. It has proved useful to begin purging when the temperature in the plaster mould has increased for about 8 – 12° C; according to our experience this will take place approximately 5 min. after final setting time. If the temperature of plaster mix amounts e.g. to 22° C, purging should begin at 30 – 34° C.



We recommend the following procedure:

- Begin purging after temperature increasing of 8 – 12° C
- Begin purging with a pressure of 0.5 bars
- Increase the pressure every half minute by 0.5 bars
- To a maximum pressure of 5.0 bars
- Holding time at maximum pressure 20 min

c) Preparing the moulds before use

Moulds, which have been stored, are to be dipped into water for 30 minutes.

Packaging

Paper bag with foil liner	25 kg
Big bag	1000 kg

Shelf life

AS-DUR AB 40 can be stored at room temperature in closed, moisture-proof containers for at least one year

Longer storage at temperatures above 30°C may reduce shelf life.

The above recommendations are given to the best of our knowledge. We grant the quality of our products according to our specification. Any further liability cannot be accepted since the proper application of our products is outside of our control.