

Concrete is composed of cement, sand, aggregate (sized stones), and water. When mixed in the correct amounts, concrete is a stable and versatile building medium which can be used in a variety of applications ranging from roads, bridges and buildings, to septic tanks and even countertops for household use. The versatility in building application is accomplished by altering the proportions of air and other variables in the mixture. Strengthening materials such as re-bar, fiberglass strands, and plastic rods are then added.

For your protection, the following precautions should be adhered to when working with concrete:

- Try not to over-exert yourself when mixing or moving concrete, especially when using a wheelbarrow, shovel, or trough. Concrete is extremely heavy and caution must be taken to avoid back, shoulder, or other muscle strains. Keeping yourself physically fit and performing pre-work stretching exercises can aid in injury prevention.
- Always wear safety glasses when mixing or pouring concrete. The lime and cement dust can be very irritating to the eyes. If it enters your eyes, rinse for 15 minutes. If eyes are still irritated, seek medical attention.
- Always wear gloves and a long sleeve shirt, if possible, when working with concrete. The cement can cause irritation when it comes into contact with skin. Lime burns are common in the industry but can be lessened by barrier creams or gloves to protect hands and forearms from industrial dermatitis.
- Read and heed the manufacturers' recommendations on concrete additives, acids for etching, form release oils, or other chemicals used in conjunction with concrete.

If you have any questions regarding the products you're using or would like more information on how to protect yourself when working with concrete, ask your supervisor for assistance. Your supervisor should be able to recommend the correct Personal Protective Equipment (PPE) for your specific task and can provide you with the appropriate Safety Data Sheet (SDS).

Proper PPE:

- Safety Glasses
- Alkali-resistant Gloves
- Appropriately Fitted Work Clothing
- Long Sleeve Shirts
- Elevated Rubber Waterproof Boots