Method Statement for Mortar Mix with Sharp Sand

1. Objective

To provide a clear procedure for mixing mortar using sharp sand to ensure quality and consistency in construction applications.

2. Materials

- Cement (Type as specified)
- Sharp sand (well-graded)
- Water (clean and free of contaminants)

3. Equipment

- Concrete mixer or mixing trough
- Shovels
- Measuring containers (for cement and sand)
- Water measuring device
- Trowels or pointing tools

4. Health and Safety

- Wear appropriate PPE (gloves, goggles, dust mask).
- Ensure proper ventilation when mixing indoors.
- Follow local safety regulations regarding cement handling.

5. Procedure

5.1 Mixing Ratio

1. **Standard Ratio**: A common mortar mix ratio is 1 part cement to 3 parts sharp sand. Adjust according to project specifications.

5.2 Mixing Process

1. **Preparation**:
    - Ensure the mixing area is clean and free from debris.
    - Measure out the required amounts of cement and sharp sand.
2. **Dry Mix**:
    - Combine the dry ingredients (cement and sharp sand) in the mixer or mixing trough. Mix thoroughly until the mixture is uniform in colour.
3. **Add Water**:
    - Gradually add clean water while mixing. The amount of water should be enough to achieve a workable consistency (approximately 0.5 parts water for every part of cement, but adjust as necessary).
4. **Final Mix**:
    - Mix until the mortar is homogeneous and has a smooth, workable consistency. Avoid over-mixing to prevent air entrapment.
5. **Testing Consistency**:
    - Perform a slump test or "ball" test to ensure the mix is suitable for the intended use.

6. Quality Control

- Inspect the mixed mortar for consistency and colour.
- Conduct periodic checks of raw materials to ensure they meet specified standards.

7. Storage

- Use the mortar within the specified working time (usually within 1-2 hours).
- Store any unused mortar in a cool, shaded area and cover it to prevent drying.

Method for Drawing Aggregate to the Surface

1. Objective

To describe the process of drawing aggregates to the surface for aesthetic finishes or structural purposes.

2. Materials

- Mortar mix (prepared as per the above method)
- Clean aggregates (specific size as per requirements)

3. Equipment

- Trowels or hand tools
- Brush or broom

- Water sprayer (if necessary)

4. Health and Safety

- Follow PPE guidelines similar to those mentioned above.
- Ensure the working area is clear of hazards.

5. Procedure

5.1 Application

1. **Prepare Surface**:
    - Ensure the surface where the mortar will be applied is clean and free from dust or debris.
2. **Apply Mortar**:
    - Use a trowel to apply the mortar mix evenly onto the substrate.
3. **Embed Aggregates**:
    - Sprinkle or press clean aggregates into the surface of the fresh mortar. Ensure that they are uniformly distributed.

5.2 Drawing Aggregate to Surface

1. **Trowel Technique**:
    - Using a trowel, lightly press the aggregates into the mortar while simultaneously pulling the trowel across the surface to expose them.
    - Work in sections to maintain control over the exposure.
2. **Watering (if needed)**:
    - Lightly mist the surface with water if the mortar begins to dry too quickly, facilitating the drawing of aggregates.
3. **Final Finishing**:
    - Once the desired aggregate exposure is achieved, finish the surface as required (smoothing, brushing, or leaving as is for a textured finish).

6. Quality Control

- Inspect the finished surface for uniformity and coverage of aggregates.
- Ensure no excessive mortar covers the aggregates.

7. Curing

- Follow standard curing procedures for mortar to ensure proper hydration and strength development.