Toolbox Talk: Water

Water use in construction

1 Essential for construction
2 Limited supply
3 Increasing cost

Water is integral to the economy, we need it for energy production, industrial processes, to grow food and, of course, for construction. In the coming years, the combined effects of climate change and a growing population are likely to put increasing pressure on our rivers, lakes and aquifers. If we do not act now to manage our demand for water, the security of our water supplies could be compromised.

What is the situation in the UK?

It is a misconception that the UK has plenty of water.

**FACT** - already, parts of England have less rainfall per person than many Mediterranean countries.

**FACT** - increasing demand will result in increasing cost both at home and on site as we fund new sources of supply.

**FACT** - water resources are under pressure and current levels of water abstraction are unsustainable in places.

What does this mean for construction?

- We can ensure no water is wasted.
- By reducing water usage, projects will benefit from cost savings.
- As an industry a commitment has been made to reduce water usage by 20% from a start position of 148m³/£million contractors output. We all have a responsibility to measure progress against this target.
- We will be able to identify if water from other sources might be an appropriate alternative to using water of drinking quality standard.
Water Hierarchy:

- Eliminate use
  - Is the process or activity really necessary?
  - Is there a cost effective alternative to water?
- Alternative ‘non-potable’ source
  - Eliminate inappropriate use of drinking (potable) water. Can you use rainwater or grey water for the activity/process?
- Reduce
  - Explore options to improve efficiency. Can fittings or processes be updated?
- Reuse
  - Can water be treated/filtered for reuse in a process or activity?
- Recycle
  - Can water be recycled for use elsewhere?
- Disposal
  - Dispose of excess water legally and responsibly to ensure there is no flooding, pollution or inconvenience to others.

What can you do?
Hold a discussion with your team to identify where you use water on site. Refer to the ‘SFfC How to Save Water on Construction Site’ guide for the top ten quick reducing water use. Three of the most commonly applicable water saving measures are listed below;

1. Fix Leaks

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An unfixed leak can be the most significant water use on site. Leaks can come from damaged washers in taps, worn valves and corroded or damaged pipework.

2. Fit trigger guns to hoses

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Hoses left running when not in use waste a lot of water in a short time. Fit robust trigger guns to hoses so that flow can be controlled at the point of use.

3. Running taps

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Flow from taps is often more than is needed. Consider adapting taps by either fitting a flow restrictor or aerating tap insert. Changing the tap is another option. Turn taps off.

Take away message
- Apply the water hierarchy. Prevent use, improve efficiency, consider alternative sources, reuse and recycle.
- Water is our most precious resource and every one of us has responsibility to conserve it.