

Water Usage Calculations

Water usage 'Ready Reckoner' table.

The following table can be used to calculate the average volume of water required to produce a known amount of product and/or the water quantity remaining in the product.

Type	Units	SWC (Specific Water Consumption)	Vol Water m ³ in Product
Concrete Products	m ³ /t product	1	0.1
Concrete Blocks	m ³ / 200 blocks	1	0.25
Reinforced Concrete	m ³ /m ³ dry concrete	0.4	0.135
Concrete slab production	m ³ /t	0.04 - 0.4	0.1
Industrial Sand	m ³ /t	0.61	0.08
Washed Sand and Gravel	m ³ /t	0.02	0.02

SWC- Volume of water (m3) brought onto site per unit of product despatched

*Table is based on figures from Environment Agency R&D Technical Report W6-056/TR2 and input from the Quarry Product Association Members.

i.e. a quarry produces 4000 blocks per day, it would therefore abstract:

- $4000/200 \times 1 = \underline{20m^3}$ per day to manufacture the blocks; of which
- $4000/200 \times 0.25 = \underline{5m^3}$ per day will leave the quarry in the blocks

Other Methods for Determining Volume of Abstracted Water:

- 1. Pump rate x number of hours of use**
- 2. Machine specification x number of hours of use**
- 3. Number of secs/mins/hours a bucket/tank takes to fill (no. of tank fills used per day)**

Please note all of the above methods can be used individually or together to calculate the total volume of water abstracted in a quarry.

If you require any assistance with filling in an application form or have any further queries, then please contact the Abstraction and Impoundment Licensing Team on:

AIL.Team@doeni.gov.uk

OR

028 9263 3462