

Lightweight aggregate in sustainable construction



LYTAG lightweight aggregate can assist project teams in overcoming design limitations imposed by the weight of traditional aggregates. It can help reduce the amount of reinforcement necessary, depending on design criteria, and enable smaller foundation sizes to be used or even negate the need for piling. All this can add up to a reduction in the project costs or an enhancement of the build.

Secondary aggregate can be used in a range of construction applications including structural concrete, precast concrete, screeds and fills. It helps improve the sustainability credentials of a project by diverting material previously destined for landfill and also reducing the demand on virgin aggregate.

Many of the UK's landmark structures have had their sustainability credentials enhanced and the incorporation of innovative designs into the construction by using lightweight aggregate. One such is the Swiss Ré building, designed by architect Norman Foster. The 'Gherkin' was designed to appear less bulky than other buildings of a comparable size and this was facilitated in part by choosing concrete made using lightweight aggregate. The structural concrete in the 180m high tower was made using 4–12mm LYTAG LWA (now 4/14mm), and 4/8mm LYTAG LWA was used for no fines screeds.

Further information: LYTAG (web: www.lytag.net).