Carbon Neutral Round Tower, Portsmouth

35 Tonnes of IKO Permaphalt Waterproofing System

Project Description

The Round Tower (dating back to the 1400's) is a fortification at the entrance to Portsmouth harbour. A Grade I listed building that sits (actually overhangs) the Portsmouth sea front and is susceptible to all types of coastal weather.

The current waterproofing system, that is essential for protecting this historic tower, needed replacing with a longer term solution.

The IKO Permaphalt System was chosen for this project due to the 20 year guarantee offered and the previous heritage projects IKO have successfully helped preserve with various waterproof solutions.

The existing coverings were removed and replaced by Southern Flat Roofing & Pitched Roofing Ltd, providing a surface that would withstand constant foot traffic as well as the weather that many seafront structures suffer from.


After


After


Before

The net carbon footprint of this project is entirely offset using internationally approved carbon credits, which means for every tonne of Mastic Asphalt made, we are helping to fund environmental and humanitarian causes.

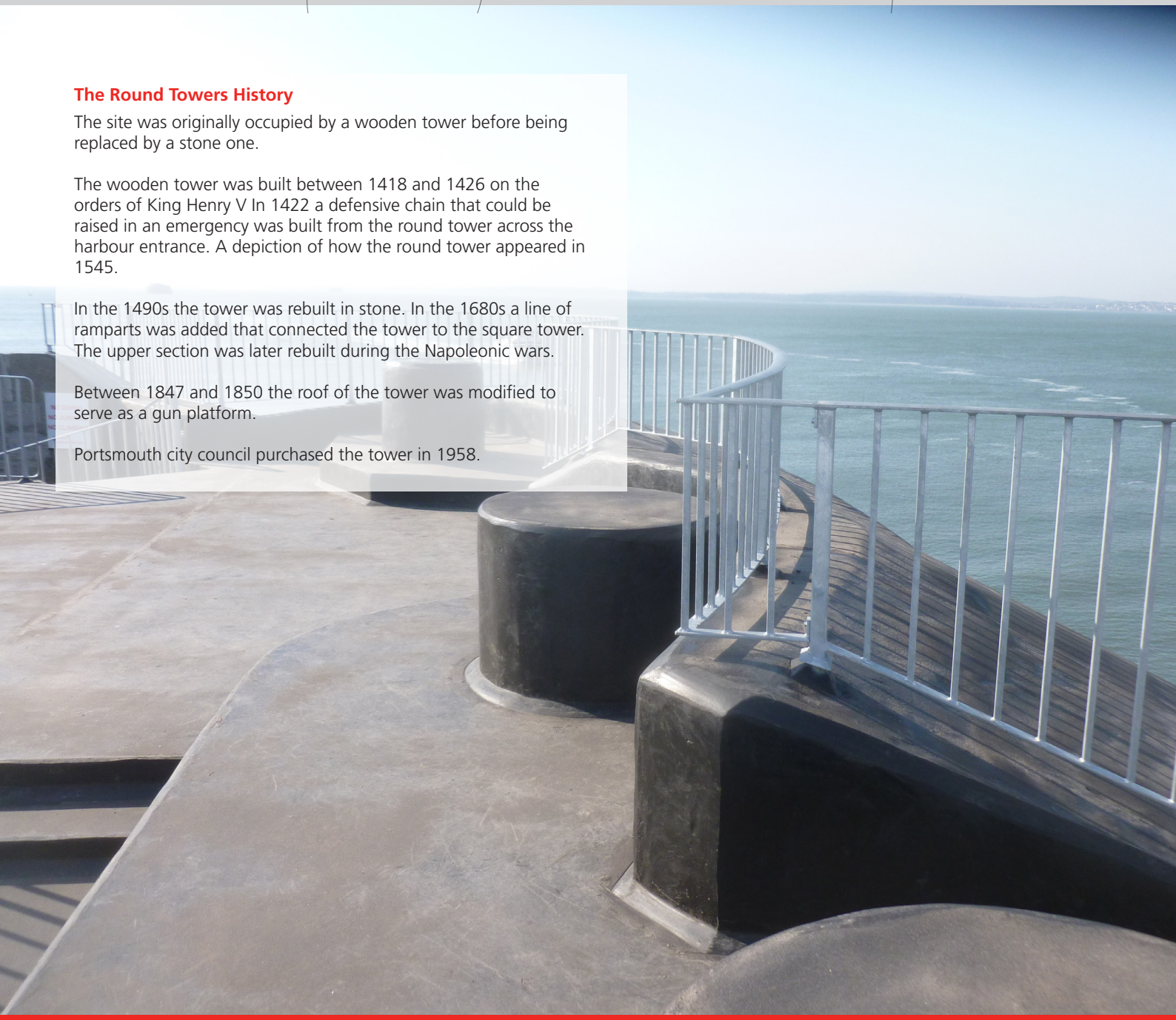
Impact Calculator: 35 Tonnes Mastic Asphalt = 5.5 Tonnes of CO_2 Offset

Impact Sector	Impact	Quantitative Data
Environment	Wood Saved	3 tonnes
	Area Protected	0.01 hectares
Social	Number of Stoves	1
	Time Saved	67 hours
	Children Impacted	3
	Elderly People Impacted	1
	Total People Impacted	5
Economic	Working Time Saved	67 hours
	Working Days Equivalent	8 days
Health	Likely reduced cases from project support	
	Respiratory Illness (Lower Chest / Lung)	1
	Asthma	1
	Ear, Nose and Throat Irritation	0
	Total Reduced Instances of Serious Illness Attributed to Indoor Smoke	2

sales.uk@iko.com t: 01257 255 771 www.ikogroup.co.uk

Carbon Neutral Round Tower, Portsmouth

35 Tonnes of IKO Permaphalt Waterproofing System



The Round Towers History

The site was originally occupied by a wooden tower before being replaced by a stone one.

The wooden tower was built between 1418 and 1426 on the orders of King Henry V In 1422 a defensive chain that could be raised in an emergency was built from the round tower across the harbour entrance. A depiction of how the round tower appeared in 1545.

In the 1490s the tower was rebuilt in stone. In the 1680s a line of ramparts was added that connected the tower to the square tower. The upper section was later rebuilt during the Napoleonic wars.

Between 1847 and 1850 the roof of the tower was modified to serve as a gun platform.

Portsmouth city council purchased the tower in 1958.

Carbon Zero: http://www.co2balance.com/

The data from the Impacts are based on the field work carried out by CO2balance within the project locations in Kenya. The data that is gathered is in line with the requirements of the Gold Standard as part of the annual Monitoring. These Monitoring Reports are available on request. Data is then cross comparable against national averages in Kenya to ensure accuracy. Assumptions and extrapolations have been used where relevant. The Health Data is derived from the following sources R. Perez-Padilla et al, 2010. 'Respiratory health effects of indoor air pollution' in International Journal of Tuberculosis and Lung Disease, vol. 14 no. 9, pp1079-1086. Kenya National Bureau of Statistics. (2008). Kenya Integrated Household Budget Survey. Ministry of Planning and National Development, p1-300. 3 Wood saved and clean water supply - Calculations based on field measurements conducted by staff contracted to CO2balance and are conducted according to the requirements defined by the Gold Standard. Monitoring data is available on the Gold standard registry.

sales.uk@iko.com t: 01257 255 771 www.ikogroup.co.uk