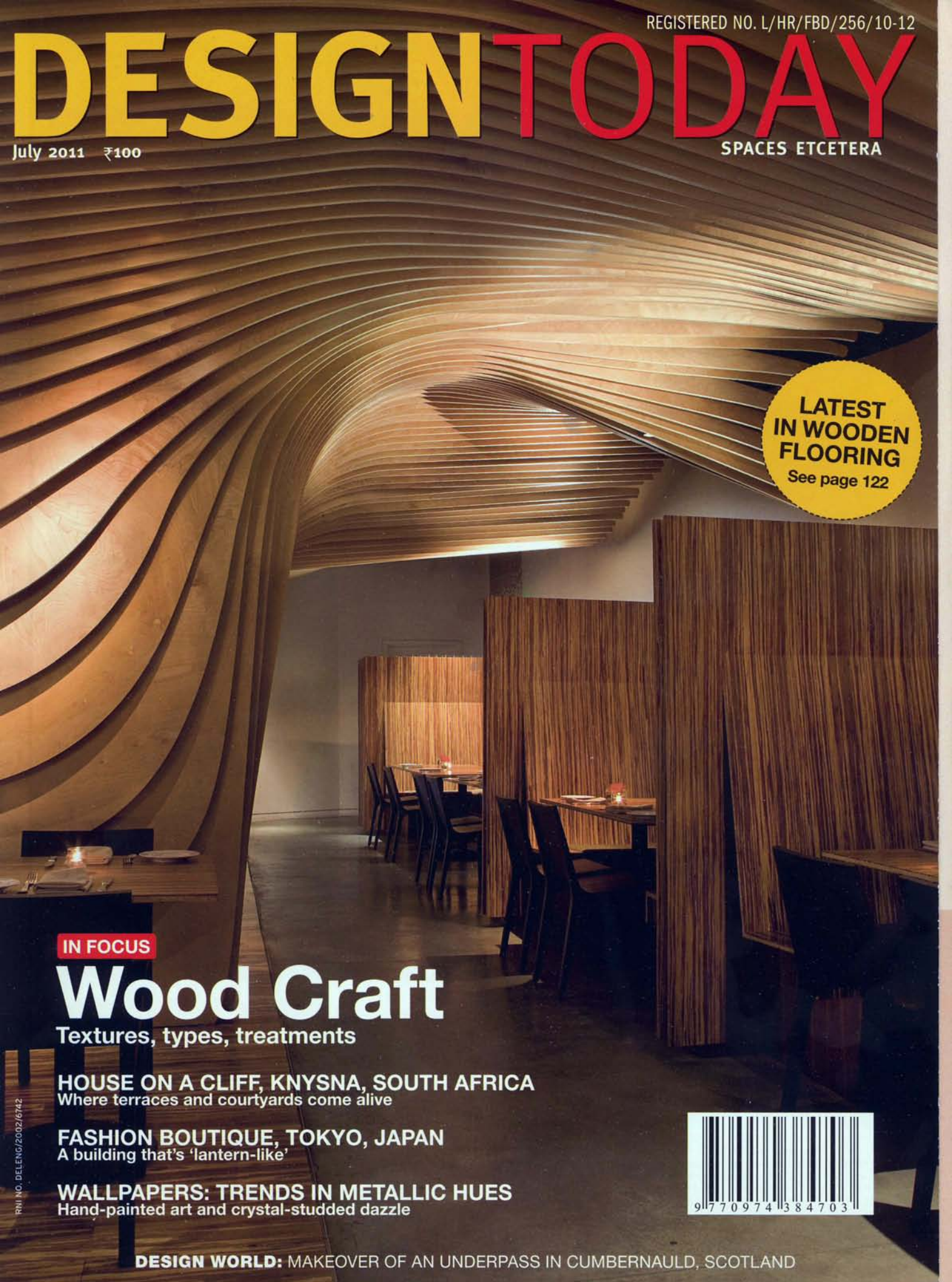
REGISTERED NO. L/HR/FBD/256/10-12

DESIGNTODAY

July 2011 ₹100

SPACES ETCETERA



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Wood Craft
Textures, types, treatments

HOUSE ON A CLIFF, KNYSNA, SOUTH AFRICA
Where terraces and courtyards come alive

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A building that's 'lantern-like'

WALLPAPERS: TRENDS IN METALLIC HUES
Hand-painted art and crystal-studded dazzle

RNI NO. DELENG/2002/6742

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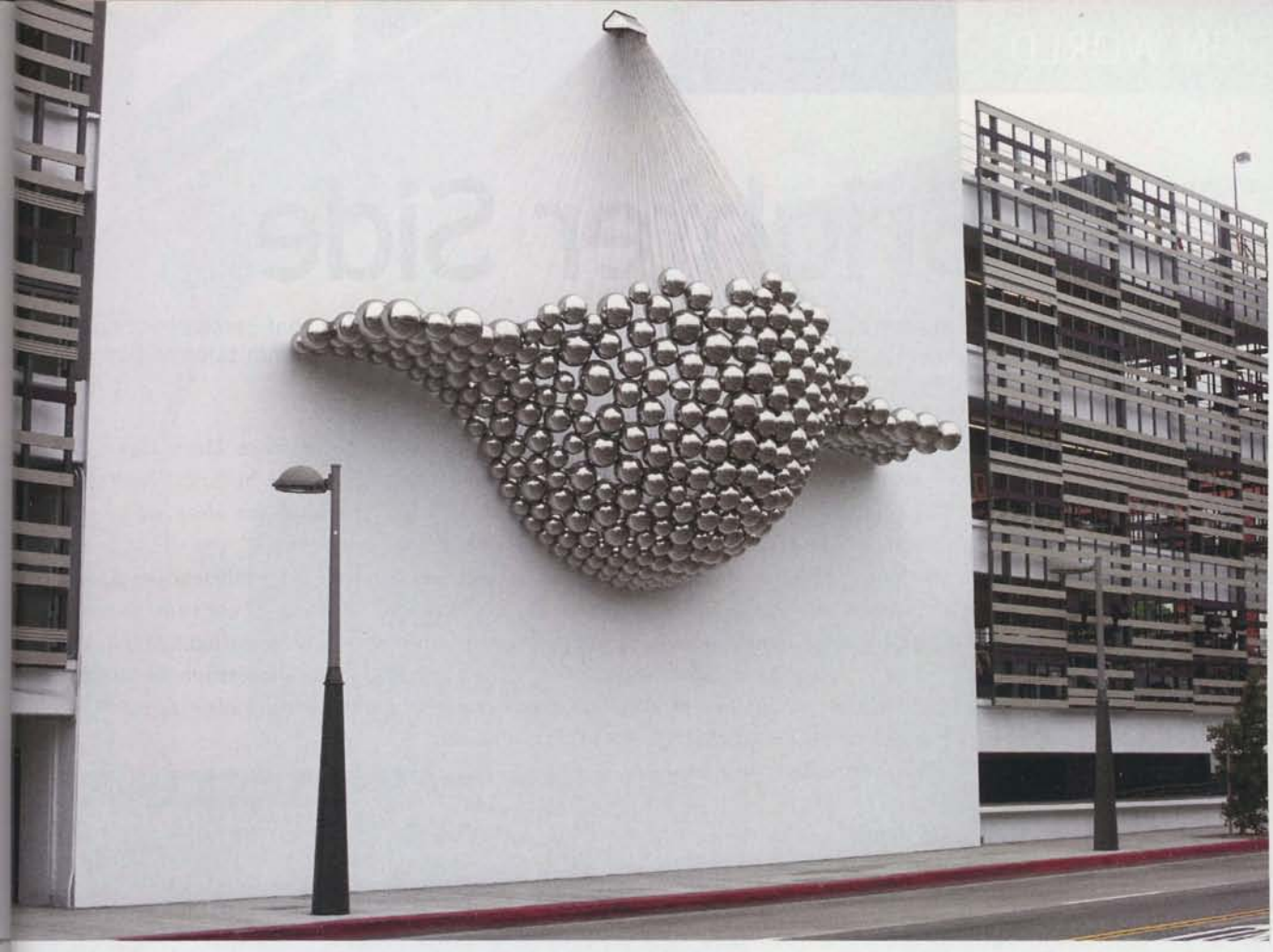
DESIGN WORLD: MAKEOVER OF AN UNDERPASS IN CUMBERNAULD, SCOTLAND

HANG IN THERE

Titled 'Cradle', this sculptural installation by Ball-Nogues Studio in Santa Monica is a pulsating form of gravity-defying, mirror-polished stainless steel spheres. They tell us the story...



Commissioned by the city of Santa Monica, 'Cradle' is situated near a beach, on the exterior wall of a parking lot of a shopping mall, originally designed by Frank Gehry. An aggregation of mirror-polished, stainless steel spheres, the sculpture functions structurally like an enormous Newton's Cradle—the ubiquitous toy found on the desktops of corporate executives in Hollywood films. Each ball is suspended by a cable from a point on the wall and locked in position by a combination of gravity and neighbouring balls. The whole array reflects distorted images of passers-by.

Aside from the Newton's Cradle reference, we wanted the overall shape to elicit things that we thought might be slightly provocative when inserted into the glitzy Santa Monica urban landscape. On the one hand, the installation resembles a big banana hammock (the type worn by unashamed men at the beach) and on the other it suggests the female reproductive system.

Regardless of what it looks like, it was an opportunity to develop a new kind of building system. 'Cradle' is as much a sculpture as it is an approach to making experimental structure in the post-digital era. We were interested in exploring ways of producing large-scaled, self-organising structures. 'Cradle' consists of an 'informal' arrangement of parts; the relationship between each cannot be accurately modelled with digital software. The work is, however, an outgrowth of digital technology.

A key concept for 'Cradle' is 'sphere packing'—the phenomenon where multiple balls squeezed together, self-organise under the effect of gravity; a process we could only approximate, at best, using computer modelling. The software helped visualise and design the overall shape of the form, though there was no way of predicting where the spheres positioned themselves in the physical world. The fabrication process was a bit like the process of slip-casting ceramics except instead of pouring ceramic slip into a mould we 'poured' hundreds of spheres. To our knowledge, this is the first time this technique has been used.

PROJECT CREDITS

Principals in Charge: Benjamin Ball and Gaston Nogues
Project Manager and Lead Fabricator: James Jones
Custom Software Design: Ayodh Kamath
Project Team: Benjamin Jennett, Rach Shillander, Alison Kung, Daniel Morrison, Jielu Lu, Amador Saucedo, Ron Shvartsman. Lawerance Shanks, Norma Silva, Andrew Lyon, Tim Peeters, Will Trossell
Structural Engineer: Buro Happold, Matthew Melnyk

Photographs: **MONICA NOUWENS;** Courtesy: **BALL-NOGUES STUDIO**