Citation:
Bands
Eric Owen Moss Architects

The tangle of steel arcs that wraps the forthcoming 16-story office tower (W)rapper, in Los Angeles, may look like superficial flourish, “but it’s fully structural,” says Dolan Daggett, project director at Eric Owen Moss Architects (EOMA), in Culver City, Calif.

Indeed, 11 of the 14 bands serve as the building’s primary load-bearing system and provide lateral stiffness. The exoskeleton also enables a column-free interior and variable floor-to-ceiling heights, and contributes to the unique views from each floor.

Though many buildings employ exoskeletons, the jury was intrigued by EOMA’s use of a polar-coordinate system rather than the conventional rectilinear grid. Juror Steven Rainville wondered how EOMA justified its approach to achieving a column-free floor plan. Daggett says the bands emphasize the building’s creative program. “It allows us to make a much more dynamic structure,” he says.

Each band emerges from an exterior wall before sweeping across the building elevation following an arc with a unique radius and center point. The bands run parallel to the building face before turning 90 degrees at building corners. Detailing the bands’ corner joints was particularly difficult because the adjoining arc segments would be coming in at varying angles. The team developed a universal half-notched connection, similar to a lap joint in carpentry, that maintains the bands’ flush surface at corners regardless of the orientation of the incoming segments.

The hollow, built-up steel-plate bands are fixed in section at 5 feet by 1 foot, but vary in thickness to tune their load-bearing capacity. EOMA developed wrapping scripts with Digital Project software to test the band configurations for structural performance. Structural elements tie the bands to the floor plates to transfer the building’s gravity and lateral loads.

Though Daggett says city approvals will take longer than a structure that complies with the prescriptive code, (W)rapper demonstrates how buildings can be engineered for their particular use. —C.H.
**Judges**

French architect *Marc Fornes* is the principal and founder of TheVeryMany in New York, as well as a self-described connoisseur of computer science. His work focuses on investigating design through codes and computational protocols. He received a master of architecture and urbanism from the Architectural Association School of Architecture in London.

Joyce Hwang, AIA, is an associate professor of architecture at the University at Buffalo, the State University of New York, and the director of Arts of the Prairie, a research and practice firm in Buffalo, N.Y., that confronts contemporary ecological conditions through creative means. She received an M.Arch. from Princeton University and a B.Arch. from Cornell University.

Steven Rainville, AIA, is a principal at Seattle-based Olson Kundig Architects, which he joined in 1998. He is also the director of the firm’s R&D department as well as the founder of Mind Mine, the firm’s forum for crowd-sourced ideas that break down boundaries between industries. He received his B.Arch. from Washington State University.

**Credits**

**Pulp Pavilion, page 104**
Client: Coachella Valley Music and Arts Festival
Design Firm and Fabricator: Ball-Nogues Studio, Los Angeles - Gaston Nogues, Benjamin Ball, ASSOC. AIA (project leads/designers); Rafael Sampaio Rocha (project manager); Ricardo Guimaraes, John Guinn, Fernando Marroquin, Rafael Sampaio Rocha, Forster Rudolph, Corie Saxman, Nicole Semenova, Ethan Schwartz (onsite project team); Andrew Fastman, AIA, Michael Anthony Fontana, Cory Hill, James Jones, Mora Nabi, Jacob Patapoff, Allison Porterfield (support); Lighting Programming: F. Myles Sciotto
Structural Engineer: Nous Engineering - Omar Garza
Funding: Commission from Goldenvoice
Size: 1,300 square feet

**Pure Tension Pavilion, page 108**
Client: Volvo Car Italia
Design Firm: Synthesis Design + Architecture, Los Angeles - Alvin Huang, AIA (principal); Filipa Valente, Cha-ching Yang, Behnaiz Farahi, Yuenming Zhou
Structural Engineer: BuroHappold Engineering
Electrical Engineer: Ascent Solar

**Bar Raval, page 110**
Client: Grant van Gameren, Mike Webster, and Robin Goodfellow
Design Firm: Partisans, Toronto - Alexander Josephson, Pooya Baktash, Jonathan Friedman, INTL. ASSOC. AIA, Ivan Vasyliv, Ariel Cooke
Consultant and Fabricator: Millworks Custom Manufacturing
Special Thanks: Klaudiusz Kociolek, Gregory Rybak, Nick Savage, CNC Software/Mastercam
Size: 1,900 square feet

**Co-Robotics and Construction, page 112**
Design Firm: Rust Belt Robotics Group, University at Buffalo, State University of New York (SUNY)

**Queen Richmond Centre West, page 113**

**Radical Railbanking, page 114**
Design Team: Master of None, Ann Arbor, Mich. - McClain Clutter (project adviser); Sehee Kim (student research assistant); Funding: University of Michigan Office of Research, funding for Artistic Productions and Performances, 2011; University of Michigan Taubman College of Architecture and Urban Planning Special Thanks: Syracuse University School of Architecture - Mark Linder

**Bands, page 115**
Client: Samitaur Consturcts - Frederick and Laurie Samitaur Smith
Design Firm: Eric Owen Moss Architects, Culver City, Calif. - Eric Owen Moss, FAIA (architect); Dolan Daggett, Vanessa Jauregui, Nicholas Barger, Zarine Nigohos, Sean Briski, Raul Garcia, Scott Nakao, Richard Yoo (project team) Structural Engineer: Arup Size: 183,000 square feet

**Philip J. Currie Dinosaur Museum, page 116**

**Breathe Brick, page 117**
Design Firm: Both Landscape and Architecture, Charlottesville, Va. - Carmen Trudell (primary investigator) Collaborators: California Polytechnic State University, San Luis Obispo (Cal Poly) - Tracy Thatcher (consultant); Natacha Schnider, Kate Hajash, Cameron Venancio, Justin Wragg, Jennifer Thompson, Michelle Kolb (student research assistants); Rensselaer Polytechnic Institute - Kateri Knox, Kylene Hoover (student research assistants) Funding: Cal Poly College of Architecture and Environmental Design’s Planning, Design and Construction Institute