



Photo Insight

AP'S LATEST EXPERT **TOM MACKIE** EXPLAINS HOW HE USED LIGHT TO BRING OUT THE WALT DISNEY CONCERT HALL'S MAGNIFICENT STRUCTURE

The AP experts

Each week, one of our team of experts of Steve Bloom, David Clapp, Clive Nichols and Tom Mackie will reveal the secrets behind one of their great images. This week it's Tom Mackie

TOM MACKIE Architecture As an internationally respected architectural photographer, Tom brings a wealth of experience to AP



I've loved the work of Canadian-American architect Frank Gehry for many years. He designed the Guggenheim Museum in Bilbao, Spain, and the Walt Disney Concert Hall, in Los Angeles, USA, pictured here. I love the sweeping staircase and the way the shapes fold into each other. The Concert Hall was completed in 2003 and I photographed it about a year after completion.

I used to live in LA, and one day I went to have a closer look at the Concert Hall. I do a recon to find the buildings I want to photograph. Generally, I draw out a plan to decide when I'm going to photograph a building, the type of light I need and the best angles to approach it from. To really bring out the Concert Hall's sweeping structure you need strong light.

The light in LA can be very harsh depending on the time of year. I took this shot in early spring: February or March. This is a good time to take pictures outdoors because the skies tend to be clearer. I couldn't photograph the Concert Hall too early in the day because the surrounding buildings cast distracting shadows across it. I had to wait until the light changed to avoid them.

The shoot took place on a Sunday morning so there was hardly anyone around. I try to plan my shoots for quiet times, to minimise the chance of people stepping into my shots. You need permission to take pictures inside the Concert Hall, but as long as you're not on the actual premises you can photograph the building's exterior. Often there are two or three iconic shots to capture and I always take an overall shot before coming in close to concentrate on the details.

I like to capture completed images in-camera where possible. I took this shot close to the building so it was very tightly framed. There was no cropping. It is a huge structure and there is limited space around it. The difficulty with this angle is fitting the whole structure in the frame while maintaining perfectly straight verticals. I was able to correct the vertical lines on my Wista 45DX field camera with 75mm lens. On this camera, the 75mm lens is the viewing-angle equivalent of 24mm on a 35mm camera. The 4x5in camera is so precise you have to use a tripod to steady the shot while adjusting details within the frame.

The Concert Hall is made from brushed titanium and the way the light reflects off it changes throughout the day. The metal isn't coloured – it reflects the colours from the sky. Everything around the building is pristine so I try to make my images look uncluttered and well designed.

Gehry's buildings go against every architectural grain, with few straight lines and no mirrored glass. To get the best out of the building's features, I wanted the light to cut across from a three-quarter angle. With a traditional building you can look at the way the light falls on the structure and work out the time of day it was photographed, but with Gehry's curved buildings it is difficult to tell. He broke the architectural mould and you can't help but be in awe of his designs. **AP**



Tom Mackie is holding an architectural workshop in Norwich, Norfolk, on 24 August. For more information visit www.tommackie.com/workshops/workshop.php?id=107. To see more images by Tom visit www.tommackie.com. Tom's book 'Tom Mackie's Landscape Photography Secrets' published by David & Charles is available from amazon.co.uk.

Talking technique

The three-dimensional effect is a combination of the light on the day, the film I was using and my shooting angle. I used a polarising filter to darken the sky and bring out the clouds, which

lifted the scene. There is a wide dynamic range and the polariser helped to balance contrast and accentuate tonal detail in the shapes. It reduced reflections in the highlighted areas and darkened the windows, helping to create balance between the metallic surfaces, the glass and the sky. I rated my Fujichrome Velvia 50 film at ISO 32 in this

high-contrast light and pull-processed the film to maintain a balanced level of contrast. I set my 4x5in camera to f/22 and 2/3 of a stop (which gave me an aperture of almost f/32) at 1/250sec. If you take a meter reading from the highlights you may underexpose the film, so I spot metered from the blue sky and pavement in the foreground. If you expose

the sky correctly, I find everything else falls into place. The main difficulty with a shot like this is making sure the highlights don't burn out. When sunlight falls on a shiny surface there is a danger this will happen, so by spending time carefully planning my shooting angle and use of lighting beforehand I avoided these pitfalls.