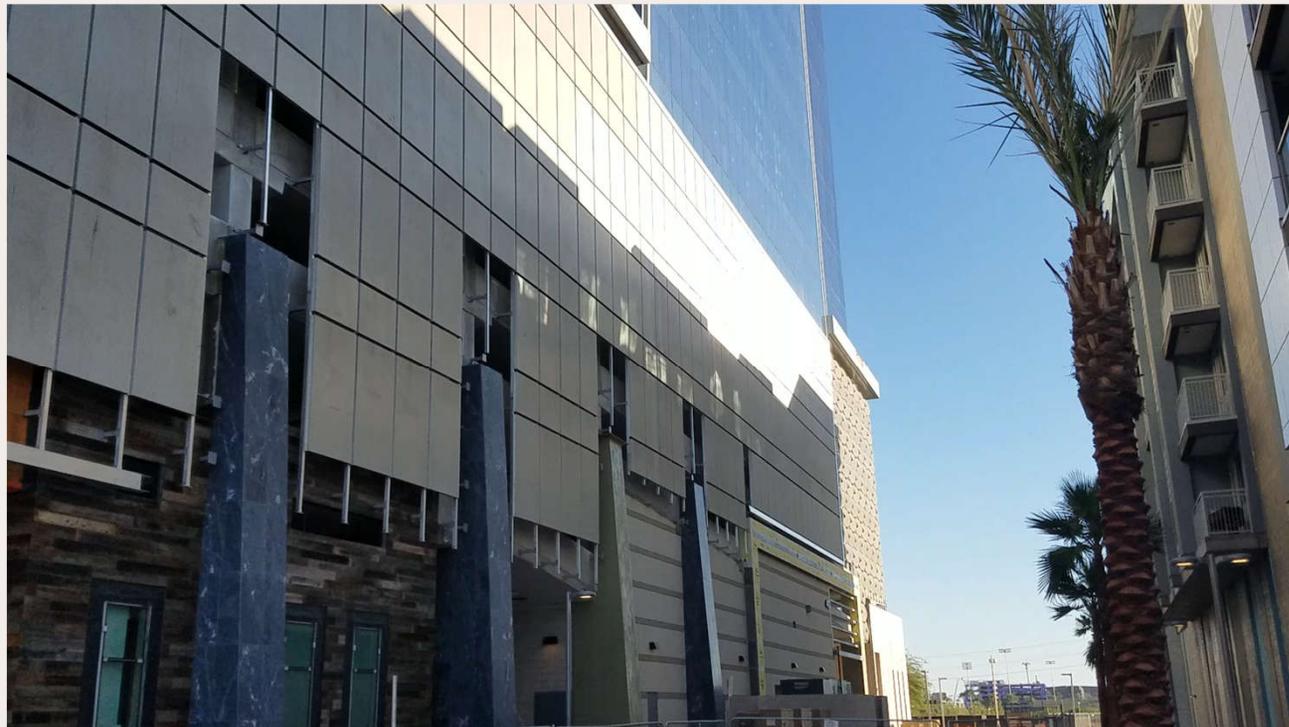


# Meet Our Team



*And more!*

# The Problem



MD Acoustics, LLC

# Source Identification



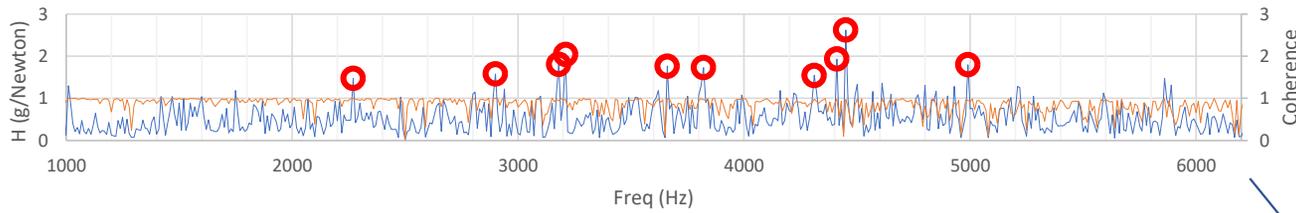
MD Acoustics, LLC



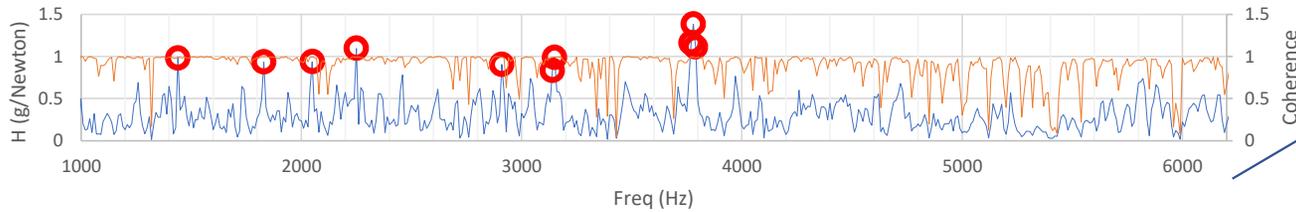
# Impact Hammer Tests

- 3 accelerometers
- 12 measuring positions
- Modal analysis shows panel resonances that match the acoustic spectrum of the building

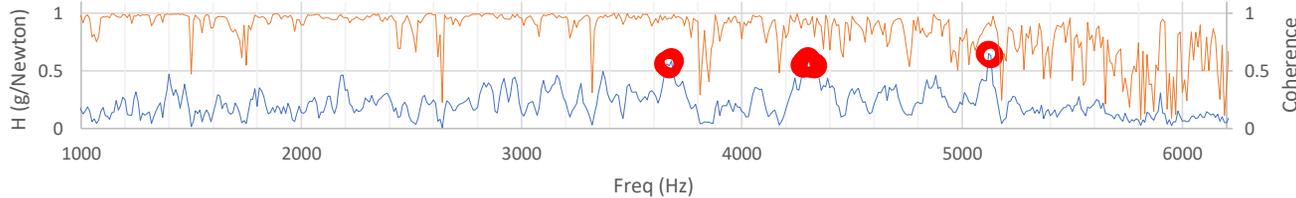




• Top 10 Resonances    — H(ch3,ch1)    — Coh(ch3,ch1)



• Top 10 Resonances    — H(ch3,ch1)    — Coh(ch3,ch1)



• Top 10 Resonances    — H(ch3,ch1)    — Coh(ch3,ch1)

# Experimental Results

No Paint

1 Coat of QuietCoat

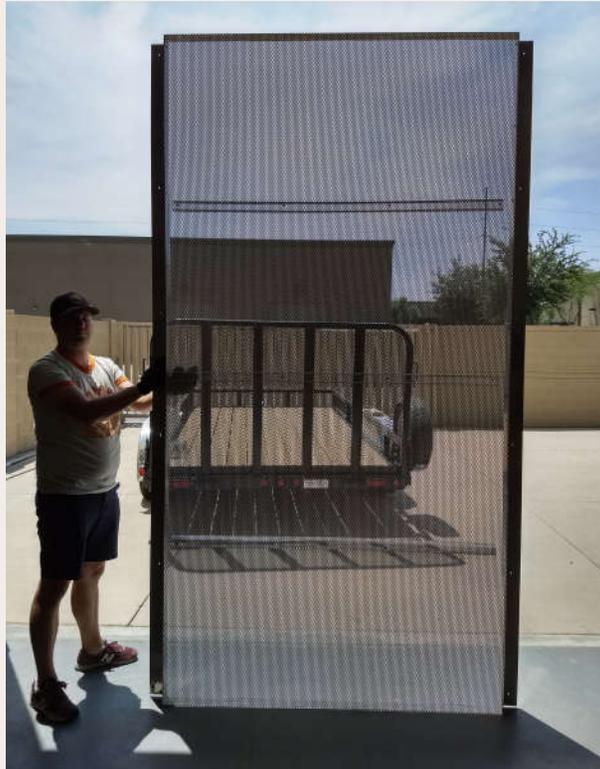
2 Coats of QuietCoat





# No Wind Tunnel: No Cry

- At about 18 mph, the panel starts to whistle.
- At 20-30 mph, it really gets going.

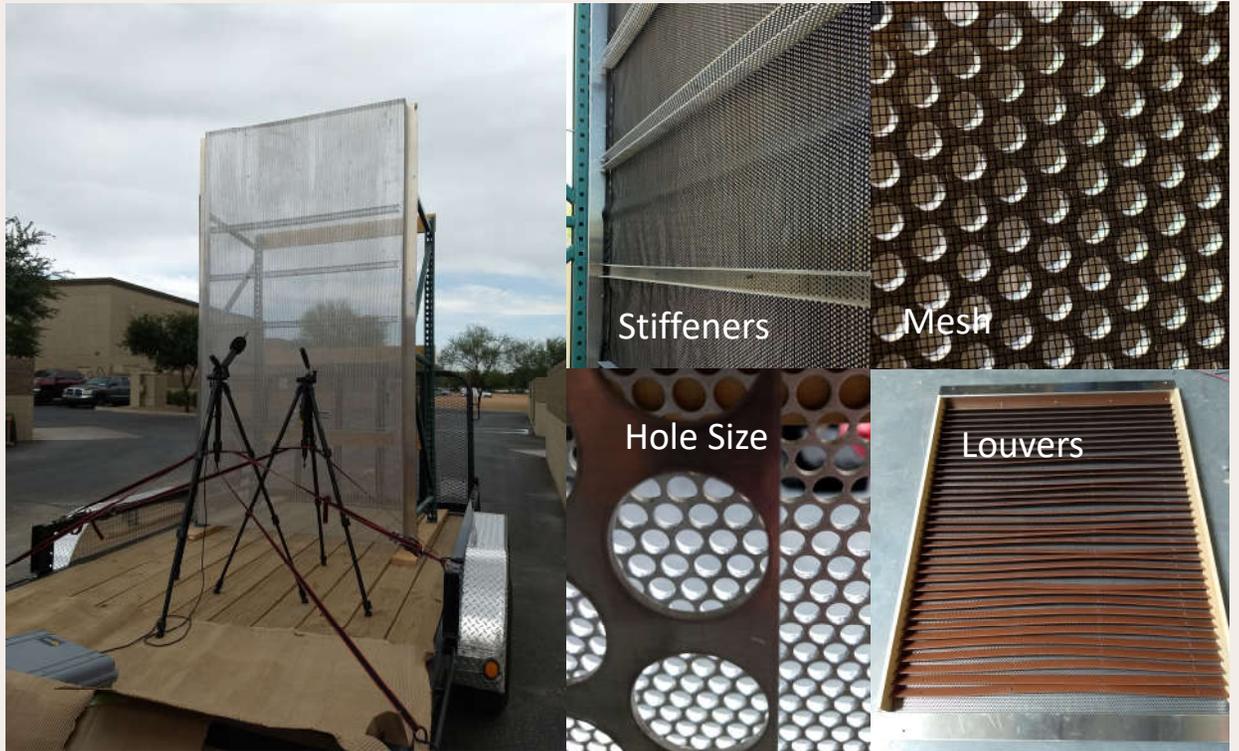




# No Wind Tunnel: No Cry

- The client did NOT want to use paint, so we explored other options:
- Stiffeners
- Mesh
- Louvers
- Larger holes

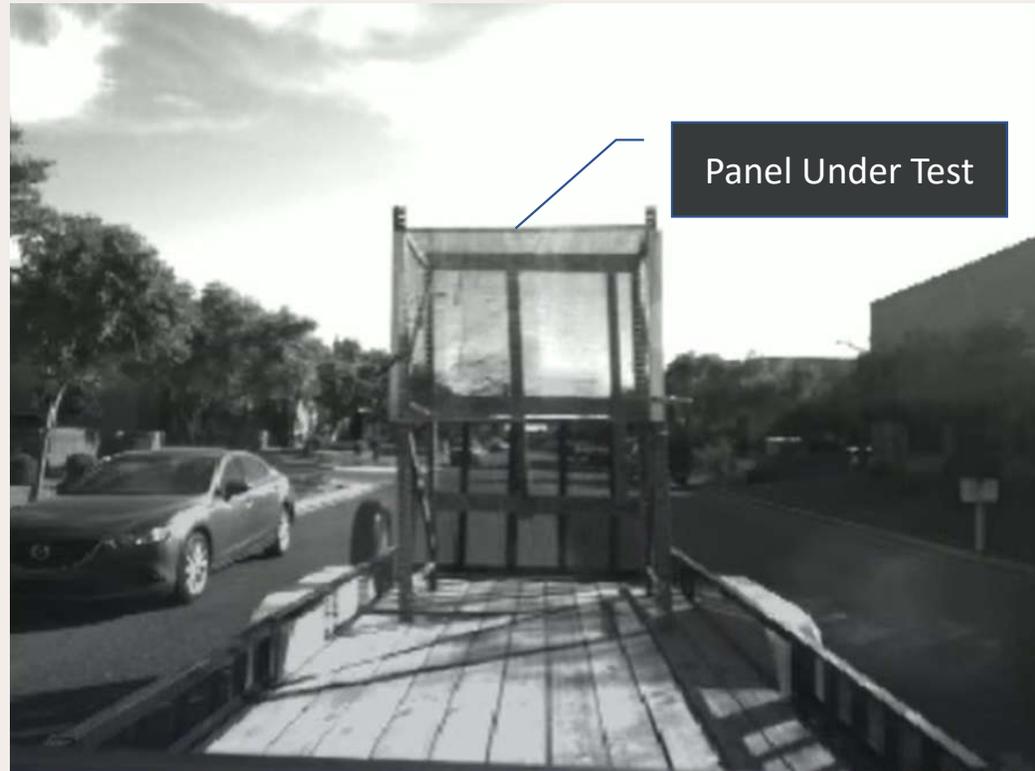
Not pictured: brave lab member who rode in the truck with the sound camera



# Acoustic Camera Tests



- Sound Camera operator located in the bed of the truck pulling the trailer
- No lab members were harmed during this project

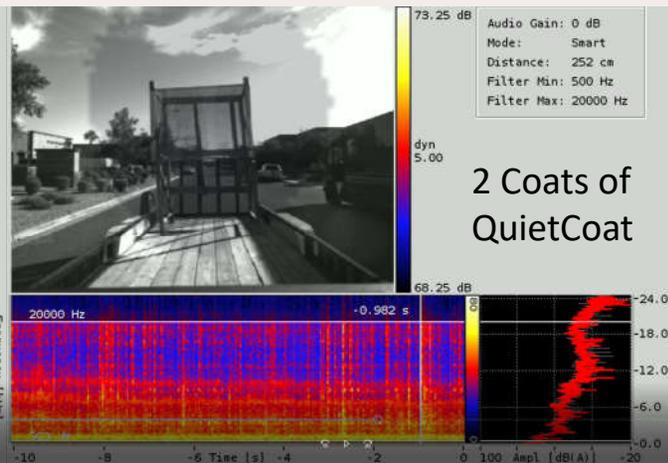
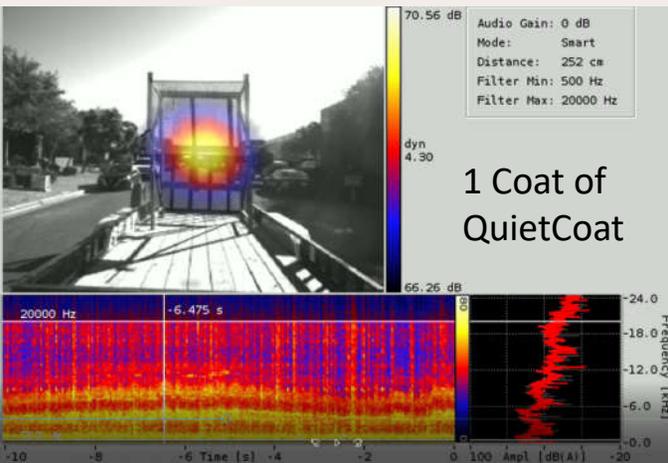
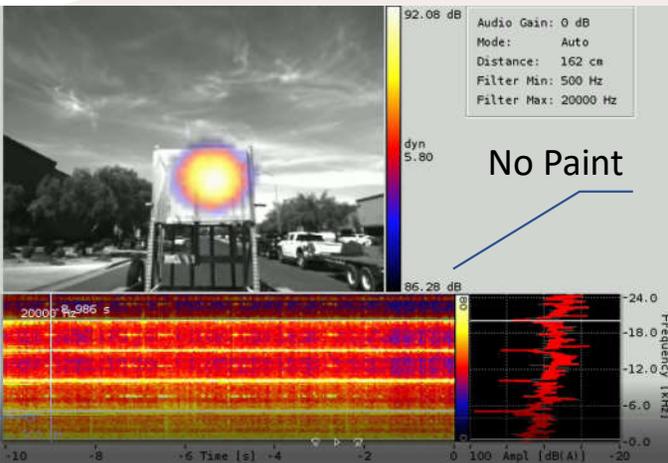


# Experimental Results



Sharp lines in the spectrogram show the harmonic resonance of the panel

With the Quiet Coat applied, the harmonics dissipate then disappear



Thank you for your attendance!



We offer a wide range of Noise, Vibration, and Engineering Services

Visit our website at  
[www.mdacoustics.com](http://www.mdacoustics.com)