

Decarbonizing Construction for Public Health & Safety

Net Zero Cement Alternative Non-Kilned Nanocomposites

jan@nanoarchitech.com www.nanoarchitech.com 415-786-5042 direct Jan Thoren founder & CEO



3 BIG Positive Impacts We bring to the Carbon Problem:

1. Remove the High Carbon Footprint in common cement manufacturing.(.9 carbon per pound)

2. Provide greater protection from increasing extremes.

3. Replace failing legacy materials with multi-beneficial advanced composites 15x's the benefits



Non-Kilned Composites vs Common Cement



95 Million Metric Tons of Portland Cement was used in 2022 - Yielded 85.5 Million Metric Tons CO_2e . If NEUSKYNS nanocomposites were used in place of Common cement, 72.68 Million Metric Tons could have been diverted in 2022!



Nanocomposite Solutions



16 or more Benefits , 5x faster curing, lasts 3x longer, uses ½ the material! highly resistant nanoceramic non-kilned composites.

Stronger, lighter & faster saves time, money +uses less materials! Increased fire, water, corrosion, antimicrobial, higher mechanical properties

- It lasts 100 + years, protects against disasters & reduces the 8% global carbon footprint of common cement to almost Net Zero!
- Recycles carbon & adds Carbon Credit value.

Caribbean Nano Ceramic SIPS panel pre-fab houses have survived 2-Category 5 Hurricanes built in 2014-2016. Proof of Concept



Expanding Global Markets to meet the needs of infrastructure bill and affordable housing.

- Winning in US, German and French competitions annually has exposed us to new markets globally!
- Being published in architecture, Build and Tech magazines, trade journals & scientific publications has been powerful in establishing a leadership role in advanced materials and Climate Tech.
- Currently we are Impel innovators through LBNL & DOE.



- Meetings & Communications with Politicians NASA, DOE and White House finally gets government interest in Climate Tech and new legislation.
- In the Year of the Woman 2023, it's time to SCALE !



Decarbonizing construction and infrastructure with a wide range of uses from finishes to hurricane resilient housing and bridge restoration.

These walls cured in subzero temps in Canada in under 2 hrs.



"Building Back Better, Faster, Cheaper & Cleaner."



Business Model

- Complete Certifications -#1 priority
- Sign contracts with manufacturer
- SCALE in California
- Follow up with MOU's and LOI's for architecture & development projects in Colorado, CA and South America.
- Expand sales in building finishes
- Move into Precast Panel
 Manufacturing & 3D printing markets



 Spread tech through supply chains, developers, architects and manufacturers to expand to international partners.



TEAM

Jeff Selph CTO - Inventor Jan Thoren CEO-Founder Paul T. Glessner – Engineering **David Williams - Marketing Tony Panasuk CFO** Lisa Farmen – Chem E-Inventor + IMPEL & Silicon Valley Advisors www.nanoarchitech.com www.linkedin.com/in/nanoarchitech













NanoArchiTech Comparative Analysis Chart

| <u>Material Attribute</u> | <u>Neuskyns</u> | Portland Cement | <u>Stucco</u> | <u>Asphalt</u> |
|------------------------------|---------------------|-------------------|---------------|----------------|
| Typical Strength (psi) | 2,200 - 12,000 | 2,000 - 4,000 | 1,200 - 1,500 | 2,000 -5,000 |
| Fireproof | Yes | No Burns < 1000 F | No | No |
| Heat Resistance | Tolerates > 2,700 F | Low | Low | Low |
| Waterproof | Yes | No | No | No |
| Conductivity of Hydrocarbons | Negligible | High | N/A | N/A |
| pH 3-11 Tolerance | Yes | No | No | No |
| Hardening Time | 5-40 mins | 2-4 hrs. | < 1 hr. | > 5 hrs. |
| Functional Cure Time | 1-3 hrs. | 1-3 days | 1 day | 1-3 days |
| Can Apply at <32 degrees F | Yes | No | No | No |
| Expansion or Contraction | Minimal | Yes | Yes | Yes |
| Temperature Related Cracking | No | Yes | Yes | Yes |
| Self-leveling | Yes | No | No | No |
| Bonds to Itself | Yes | No | No | No |
| "Green" Material | Yes | No | No | No |
| Tolerant of Salt Water | Yes | No | No | No |
| Underwater Setting | Yes | No | No | No |
| Combustible due to Fire | No | Yes | N/A | N/A |
| Flame Spread Index* | | | | |

Smoke Test*

* No Flame and No Smoke for Neuskyns™

Awards Won and Acknowledgements

WINNER - POLLUTEC STARTUP VILLAGE, LEON FRANCE 2018 WINNER - JEC COMPOSITES PARIS - FINALISTS CHICAGO 2019 ARCHITECTURAL RECORD **"BEST NEW PRODUCTS** FOR A BUILDNG ENVELOPE" 2019 BUILT WORLD WINNER "Most Innovative Architectural Technology Group" 2020 MANUFACTURING TECHNOLOGY INSIGHTS – **Top 10 Nano Material Solution Providers CURRENTLY IN** 2023 IMPEL ACCELERATOR INNOVATOR LBNL







Status of Products - New & Existing



- Bridge Projects and Housing already done in other countries with our team member can continue even without certification.
- All of our products can be used within building code rule once we provide evidence of exceeding the existing materials (*which we do*), a new product with an engineer's stamp will be allowed.
- New products incorporate various elements such as carbon, hemp, recycled materials to go carbon negative and ready to test . Requires funding!



SAVES TIME, MONEY, & THE ENVIRONMENT

- + stronger, lighter, faster
- + waterproof and fireproof to 3200 F
- + 85% less carbon than manufacturing cement
- + Sequesters Carbon !
- + Carbon Credits, Financial benefits
- + hypoallergenic & antimicrobial
- + sound, thermal & radiation barrier
- + applied by pump, spray, precast or 3D construction
- + energy conductive capabilities!



Join us in our Call To Action! Preserve the planet for future generations

- Manufacturing opportunities.
- Global patents
- Volunteer for the Earth Rescue Initiative
 Opportunities for partnerships and licensing
- Distribution Channels
- Social, Health, and Environmental Benefits



direct: +1-415-786-5042

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