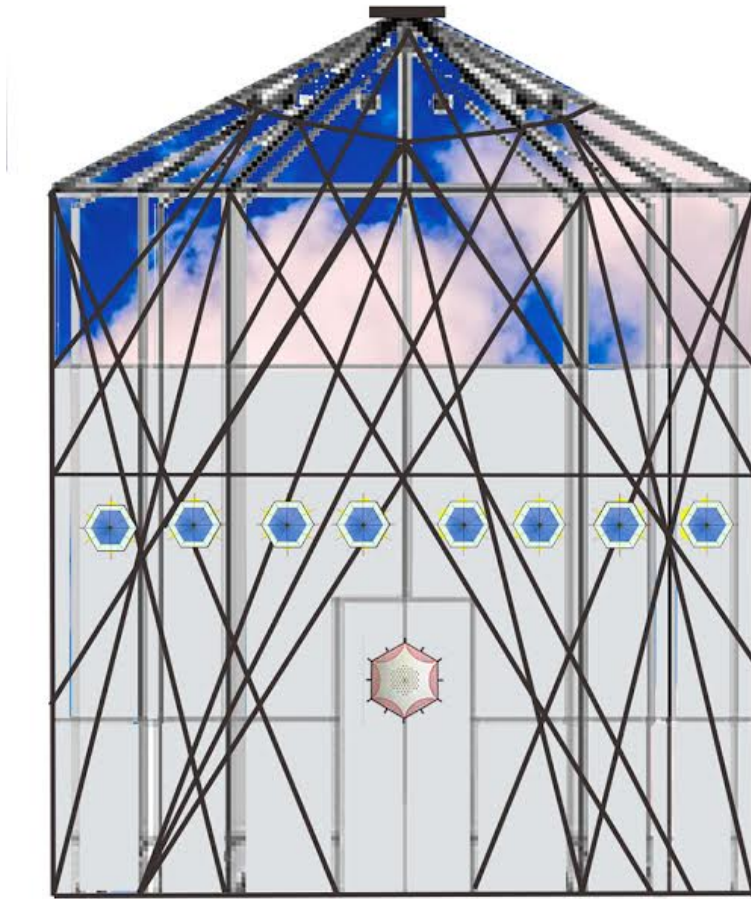


# **DOMUS CLOUD**

**Frequency – Vibration – ReBuild**

©© D.V. Rogers  
[dvr123@gmail.com](mailto:dvr123@gmail.com)

November 19th \*02016

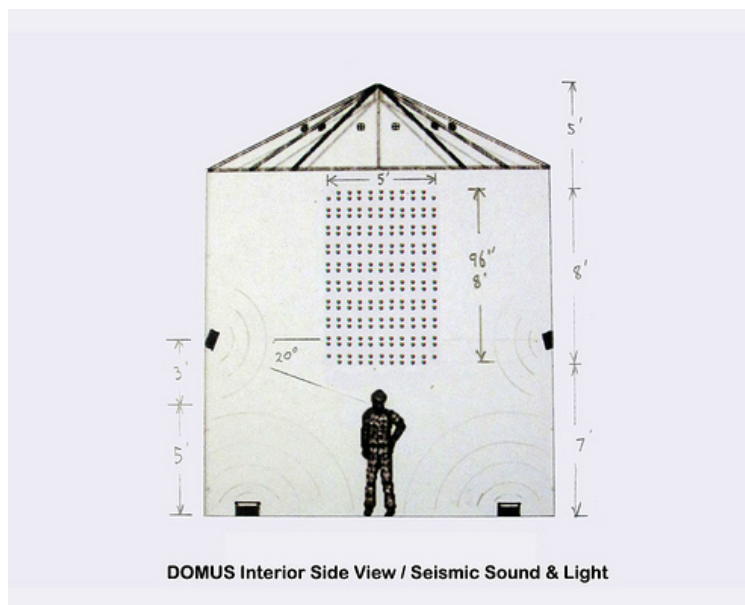


DOMUS CLOUD sound isolation re-build requires extra skin of 18 additional 8'x 4' insulation panels around outer shell of structure creating air-gap between panel skins. Color of outer panels will be silver. Hexagonal acrylic reflective connections and Bi-Filament/UV tape keep these two layers mechanically fixed. DOMUS base-isolation system is designed to absorb 1.7G seismic ground waves. The interior apex of ceiling (Only) requires 1'-2" acoustic foam panels covering 200 sq ft. Internally solid Matt Black in color. The outer DOMUS roof to be painted Hyper-REAL Clouds (if MALIBU) with waterproof seal fix. Up to 32 black ratchet straps tie down structure connecting with base isolated floor. EIGHT X 120lb concrete footings required for earth mounts enhancing seismic and storm wind resilience. Future proofing achieved with permanent hemp-crete and ferrocement weather resistant render skin.

Internally DOMUS contains a 12:4 or 18:4 sound system and audio responsive LED Pixel chandelier consisting of 576 Nodes of RGB Light. Reflective sculptural elements and crystal oscillators will be introduced during period of installation. The DOMUS NIMBUS is a multi functional experimental space exploring spatial meditation techniques, sound healing experimentation, light therapy integration, data driven musification and invites frequency and vibration based music performance and recordings.

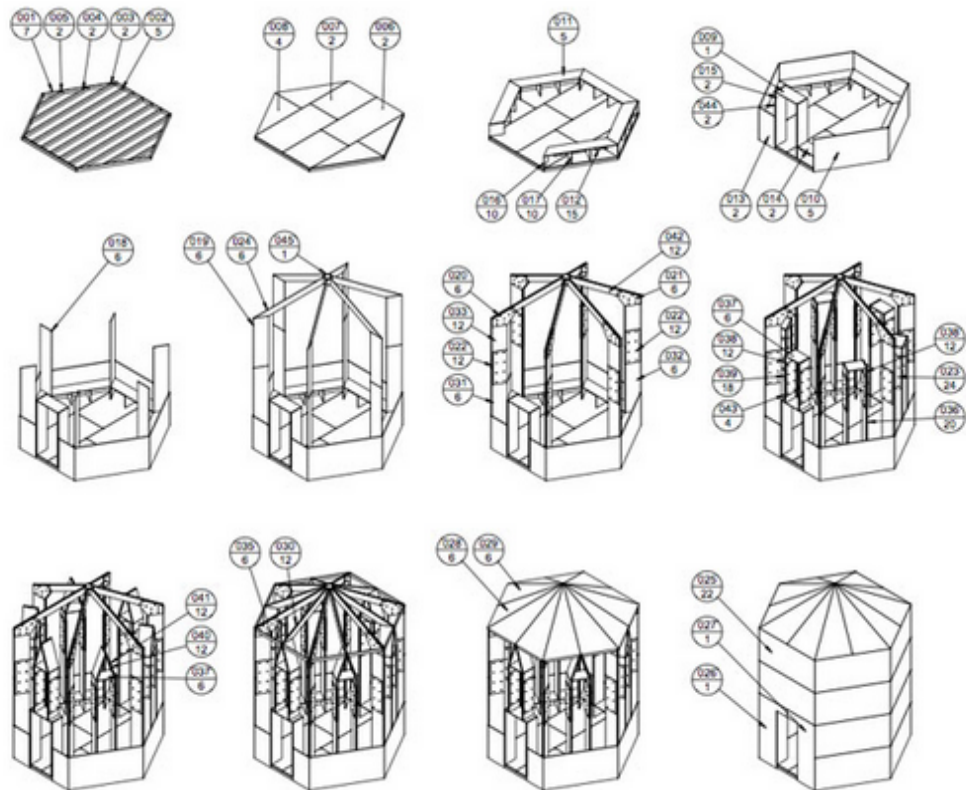
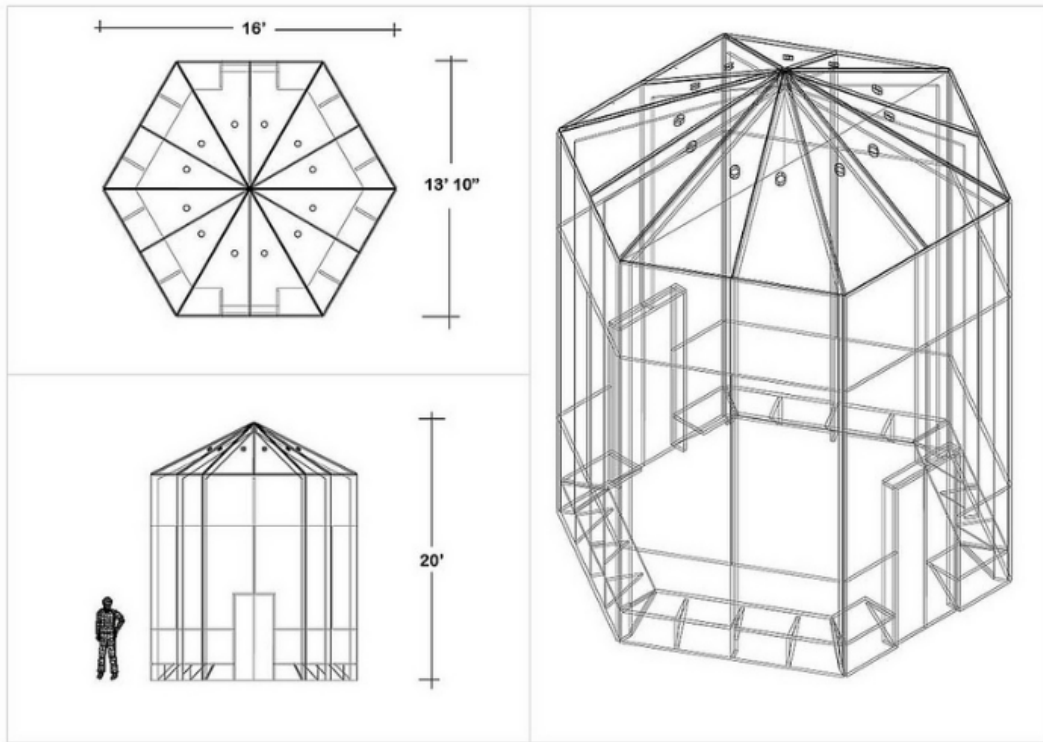
#### URL REFERENCES

- \* **DOMUS M&A** - [www.domus.urbanaction.org](http://www.domus.urbanaction.org)
- \* **Sound Healing** - [https://en.wikipedia.org/wiki/Sound\\_healing](https://en.wikipedia.org/wiki/Sound_healing)
- \* **Light Therapy** - [https://en.wikipedia.org/wiki/Light\\_therapy](https://en.wikipedia.org/wiki/Light_therapy)
- \* **Crystal Oscillators** - [https://en.wikipedia.org/wiki/Crystal\\_oscillator](https://en.wikipedia.org/wiki/Crystal_oscillator)
- \* **Cymatics** - <https://en.wikipedia.org/wiki/Cymatics>
- \* **The Music of Life" Book by Hazrat Inayat Khan** - <https://is.gd/2k9MQZ>



**DOMUS Interior Side View / Seismic Sound & Light**

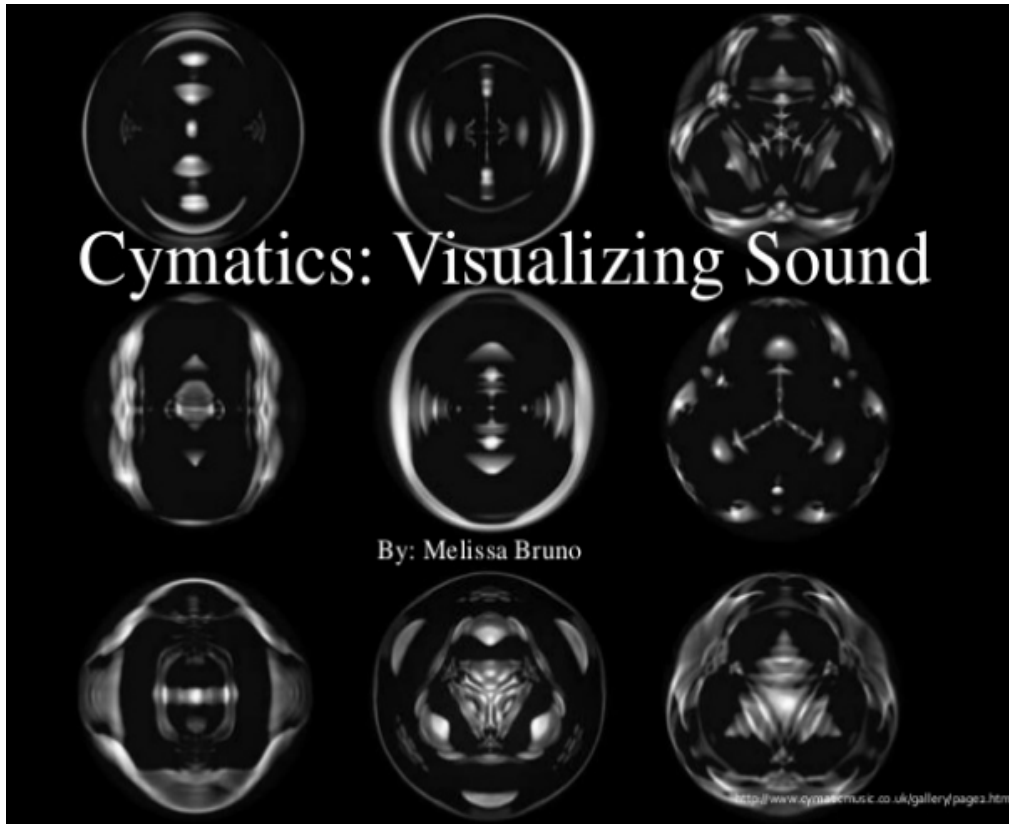






DOMUS, M&A, Silverlake, L.A. C.A. USA. 2014 - 2015

*"If we should discover the optimal frequency to which our cells respond - that is, there signature tune -- we would indeed be learning their names. Speaking their language by imprinting upon them the appropriate vibrations, we would enlist their response, opening up new perspectives for the therapy of the future"*  
**--Hazrat Inayat Khan, "THE MUSIC OF LIFE"**



## Information Visualization

### Visualization (*OED*)

- "the action or fact of visualizing, the power or process of forming a mental picture or vision of something not actually present to the sight"
- "the action or process of rendering visible"

### Information Visualization:

- "Visualization provides an interface between two powerful information processing systems—human mind and the modern computer. Visualization is the process of transforming data, information, and knowledge into visual form making use of human's natural visual capabilities. With effective visual interfaces we can interact with large volumes of data rapidly and effectively to **discover hidden characteristics, patterns, and trends**" (Gershon, Eick, & Card, 1998, p. 9) (my emphasis)

# What is “Cymatics”

*Field of inquiry – The study of modal phenomena*

Greek: κύμα (something swollen, or a wave)

## Definitions:

- “the structure and dynamics of waves and vibrations” (Jenny, 1967, p. 3)
- “the process of visualizing sound by vibrating a medium” (Grant)

## Scientific Origins:

- Traced to da Vinci, Galileo Galilei: Observations of resonance
- Robert Hooke: Sonic vibrations
- Ernst Chladni: “the father of acoustics,” and “Chladni figures”
- Hans Jenny: “father of cymatics” – Authored *Kymatik*, Vol. 1 (1967), Vol. 2 (1972)
- John Stuart Reid: acoustics engineer and creator of CymaScope



**Cymatics, meaning "wave", is a subset of modal vibrational phenomena.**

<https://en.wikipedia.org/wiki/Cymatics>

## Videos of Sand Forming Cymatic Patterns on a Metal Plate

<https://is.gd/bZuWOq>

On July 8, 1680, Robert Hooke was able to see the nodal patterns associated with the modes of vibration of glass plates. Hooke ran a bow along the edge of a glass plate covered with flour, and saw the nodal patterns emerge.

The German musician and physicist Ernst Chladni noticed in the eighteenth century that the modes of vibration of a membrane or a plate can be observed by sprinkling the vibrating surface with a fine dust (e.g., lycopodium powder, flour or fine sand). The powder moves due to the vibration and accumulates progressively in points of the surface corresponding to the sound vibration. The points form a pattern of lines, known as nodal lines of the vibration mode. The normal modes of vibration, and the pattern of nodal lines associated with each of these, are completely determined, for a surface with homogeneous mechanical characteristics, from the geometric shape of the surface and by the way in which the surface is constrained.

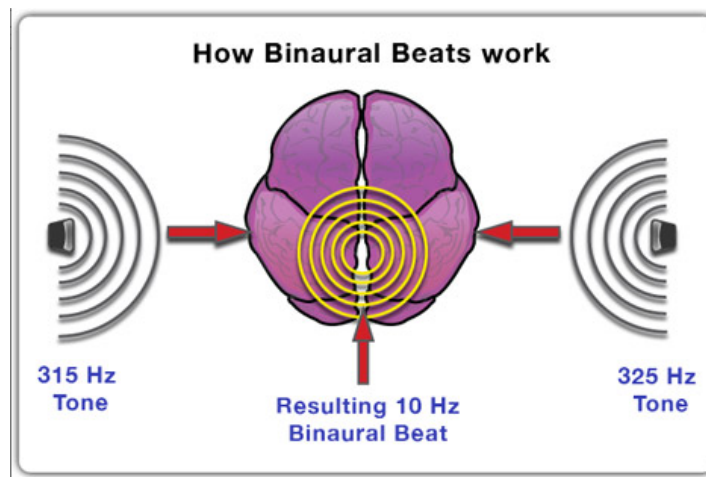
Experiments of this kind, similar to those carried out earlier by Galileo Galilei[4] around 1630 and by Robert Hooke in 1680, were later perfected by Chladni, who introduced them systematically in 1787 in his book *Entdeckungen über die Theorie des Klanges* (Discoveries on the theory of sound). This provided an important contribution to the understanding of acoustic phenomena and the functioning of musical instruments. The figures thus obtained (with the aid of a violin bow that rubbed perpendicularly along the edge of smooth plates covered with fine sand) are still designated by the name of "Chladni figures".





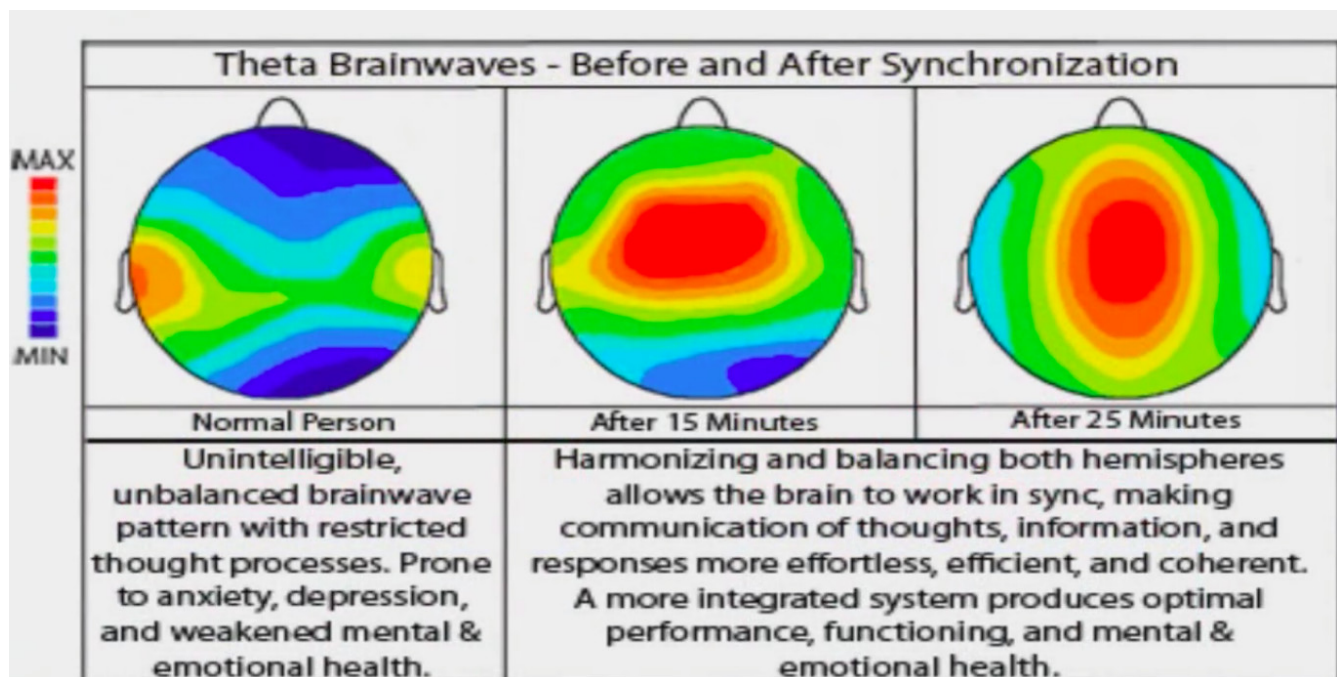
A binaural beat is an auditory illusion perceived when two different pure-tone sine waves, both with frequencies lower than 1500 Hz, with less than a 40 Hz difference between them, are presented to a listener dichotically (one through each ear). For example, if a 530 Hz pure tone is presented to a subject's right ear, while a 520 Hz pure tone is presented to the subject's left ear, the listener will perceive the auditory illusion of a third tone, in addition to the two pure-tones presented to each ear. The third sound is called a binaural beat, and in this example would have a perceived pitch correlating to a frequency of 10 Hz, that being the difference between the 530 Hz and 520 Hz pure tones presented to each ear.

REF: [https://en.wikipedia.org/wiki/Binaural\\_beats](https://en.wikipedia.org/wiki/Binaural_beats)

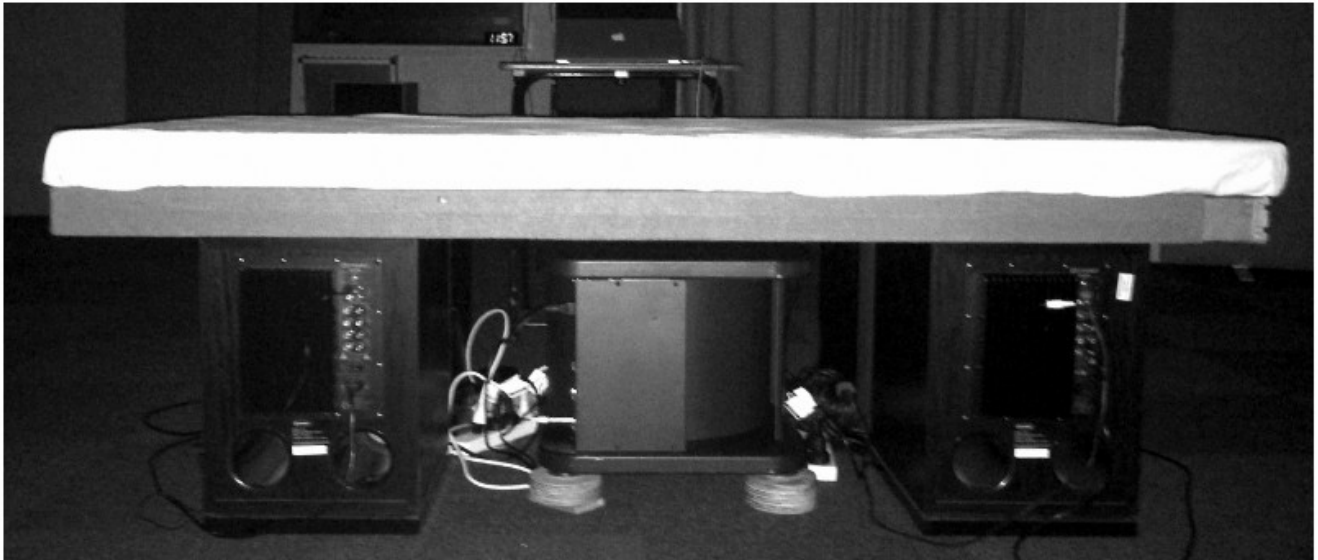




Frequency Range	Name	Associated with
>40Hz	Gamma Waves	Higher mental activity, increased perception. Alert, Problem solving, fearful states
13-39Hz	Beta Waves	Active, busy, concentration, aroused, cognition, paranoia
7-13Hz	Alpha Waves	Relaxation, pre-sleep & pre-wake drowsiness, REM sleep, dreams
4-7Hz	Theta Waves	Deep meditation/relaxation, NREM sleep
<4Hz	Delta Waves	Deep dreamless sleep, loss of body awareness



## AUDIO FREQUENCY TABLE(S)



Terramomentum (earth resonance) by Ryan McGee was an immersive, sub-sonic installation driven by seismic audification and musification. A listener lay flat on an acoustic foam table resonated by 5 subwoofers emitting seismic audifications and compositions derived from datasets of 4 major earthquakes: Haiti (2010), Christchurch (2011), Los Angeles (2014), and Anchorage (2016). The installation repeats itself in an 8 minute cycle with each new listener. Seismic events (earthquakes) occur at sub-sonic frequencies below 20Hz. The emphasis of subwoofers vibrating a table allows for a strong haptic connection to the sounds - decreasing the amount of frequency shift necessary to perceive the original data sets.

Seismic Sound Examples: <https://soundcloud.com/seismicsounds>

Musification of Seismic Data: [http://www.lifeorange.com/writing/McGee\\_ICAD2016.pdf](http://www.lifeorange.com/writing/McGee_ICAD2016.pdf)



## 528Hz | Mira Gestorum (Strange Events)

The color of 528Hz is #Emerald Seagreen and literal English translation of 528 Hz, and has Wavelength of 528 Nm (#Emerald Seagreen) - <http://is.gd/gs67bq>

**528Hz AUDIO REF:** <https://youtu.be/6xpl00ShS4M>

### SOLFEGGIO

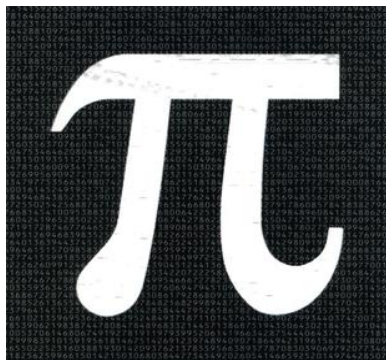
Solfeggio is a music education method used to teach pitch, and sight singing. Guido of Arezzo (991/992 – after 1033) is credited with developing our current techniques for teaching, such as staff notation and the Solfeggio "ut-re-mi-fa-so-la" ( do-re-mi-fa-so-la) mnemonic, popularized in modern times by The Kodály Method taught in schools. The 6 note ascending scale's names were taken from the first verse of the Latin hymn Ut queant laxis (To Be Loosened,) where the syllables fall on their corresponding scale degree:

396 Hz	Ut (Do) queant lax s,	<a href="http://is.gd/xNz3io">http://is.gd/xNz3io</a>
417 Hz	Reson re f br s,	<a href="http://is.gd/FL3TTn">http://is.gd/FL3TTn</a>
528 Hz	M ra gestōrum : Miracle Transformation	
639 Hz	Famul tuōrum,	<a href="http://is.gd/XecCSk">http://is.gd/XecCSk</a>
741 Hz	Solve poll t	<a href="http://is.gd/nDLpEI">http://is.gd/nDLpEI</a>
852 Hz	Labi re tum	<a href="http://is.gd/hhDNn2">http://is.gd/hhDNn2</a>

The words of the hymn were written by Paulus Diaconus in the 8th century. Paraphrased: " Do let our voices, Resonate most purely, Miracles telling, Far greater than many; So let out tongues be, Lavish in your praises."

The M ra gestōrum (528 Hz) is apparently? the exact frequency that genetic biochemists used to restore broken DNA (basic light/ sound waves.) Claimed by Biochemist Dr. Lee Lorenzen (BA in Biology from the University of California at Berkeley, UCI School of Medicine, Research Associate in the Department of Pharmacology, Biology at Cal State Fullerton, Metropolitan Collegiate Institute,) who's been awarded two US Patents on Clustered Water™ technology. He and biochemist Steve Chemiski discovered that "6 Sided Water Clusters" vibrating at 528 Hz form the supportive matrix of healthy DNA.

The structure of DNA reflects Marko Rodin's "Infinity Pattern" & features Solfeggio numbers. Ancient Pi was 3.142857 ( = Prism, = Infinite Refraction.)



Commonly Approximated as 3.14159 is the rational scientific number  
<https://en.wikipedia.org/wiki/Pi>

( = 3.142857, decimals repeated)

$$(x^2 = 6.285714 \dots)$$

(x 2 x 2 = 12.571428 . . .)

. | . | || | . | || .. | . | || | . | || | . | || | . | || .. | . | || | . | || | . | || | . | || | . | || | . | ||

528 cycles Up & Right, while 741 cycles in the opposite direction Down & Left. This is consistent with the "Devil's Interval" designated in musicology as the dissonant combination of these two specific tones. Instruments can be tuned to A444(.09 or +16 cents) to play Solfeggio, with 528 Hz as Middle C.

Solfeggio also appears in Douglas G. Preston's Toroidal Scale:

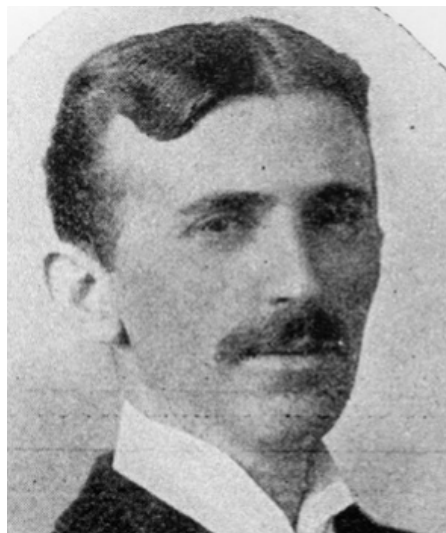
REF: <https://youtu.be/PJga1ONHhKE>

753	861	942	714	825	936	726	834	915
429	537	618	471	582	693	483	591	672
186	294	375	147	258	369	159	267	348
798	879	987	7	8	9	789	897	978
465	546	654	4	5	6	456	564	645
132	213	321	1	2	3	123	231	312
762	843	951	741	852	963	735	816	924
438	519	627	417	528	639	492	573	681
195	276	384	174	285	396	168	249	357

753	861	942	714	825	936	726	834	915
429	537	618	471	582	693	483	591	672
186	294	375	147	258	369	159	267	348
798	879	987	7	8	9	789	897	978
465	546	654	4	5	6	456	564	645
132	213	321	1	2	3	123	231	312
762	843	951	741	852	963	735	816	924
438	519	627	417	528	639	492	573	681
195	276	384	174	285	396	168	249	357



Nicola Tesla tells us, "If you only knew the magnificence of the 3, 6 and 9, then you would have a key to the universe." Additional 3 frequencies (174, 285, & 963) are added to the original 6, "completing the perfect cycle of sound," the 3rd, 6th, and 9th frequencies become 396, 639, 963.



If you want to find the secrets of the universe, think in terms of energy, frequency and vibration.

— Nikola Tesla —

Pythagoras told us to reduce every number to 1 digit (i.e.  $15 = 1+5 = 6$ .) We find the root vibrational numbers of Solfeggio frequencies are alternating 3's, 6's, & 9's.

Hz	Root#	Nm	A444(.09)	Music	Note
174	3	Ultraviolet	Invisible	F	
285	6	Ultraviolet	Invisible	D	
396	9	Ultraviolet	Visible	G	DO
417	3	Magenta	Visible	G#	RE
528	6	Green	Visible	C	MI
639	9	Red	Visible	E	FA
741	3	Infrared	Visible	F#	SO
852	6	Infrared	Invisible	A	LA
963	9	Infrared	Invisible	B	
1074					...

Ut - 396 Hz - turning grief into joy, liberating guilt and fear  
 Re - 417 Hz - undoing situations and facilitating change  
 Mi - 528 Hz - transformation and miracles (DNA repair)  
 Fa - 639 Hz - reconnecting and balancing relationships  
 Sol - 741 Hz - solving problems, expressions/solutions  
 La - 852 Hz - awakening intuition, returning to spiritual order

\*\*\*\*\*  
**FREQUENCY VIBRATION REFERENCES**  
\*\*\*\*\*

**Sound Healing**

<http://www.soundhealingcenter.com/>

**The Su fi Message of Hazrat Inayat Khan**

[https://wahiduddin.net/mv2/II/II\\_0.htm](https://wahiduddin.net/mv2/II/II_0.htm)

**Understanding Frequencies:**

<http://blog.sonicbids.com/understanding-frequencies-how-to-describe-what-youre-hearing-to-your-sound-tech>

**Boost Your Mind, Spirit And Body With Healing Frequencies**

<https://attunedvibrations.com/>

**432hz Music**

<https://soundcloud.com/groups/432-hz-music>

**Amazing Resonance Experiment!**

<https://youtu.be/wvJAgUBF4w>

**Chladni Patterns**

[https://en.wikipedia.org/wiki/Ernst\\_Chladni](https://en.wikipedia.org/wiki/Ernst_Chladni)

**CYMASCOPE**

<http://www.cymascope.com/>

**Ocean Noise Generator**

<https://mynoise.net/NoiseMachines/oceanNoiseGenerator.php>

**Sound Machine Reviews**

<http://www.toptenreviews.com/electronics/family/best-sound-machines/>

**Vibrational Healing - Nerve, Cell & DNA Regeneration - Pure Tone Binaural Beats**

<https://www.youtube.com/watch?v=kWwVLFD3cig>

**Is there any proof that 528 Hz repairs DNA?**

<https://www.quora.com/Is-there-any-proof-that-528-Hz-repairs-DNA>

**Mi Frequency 528 Hertz**

<https://sites.google.com/site/myfarmingsecrets/Harmonics>

**Vibrational Healing - Nerve, Cell & DNA Regeneration - Pure Tone Binaural Beats**

<https://youtu.be/kWwVLFD3cig>

**Forgotten In Time: The Ancient Solfeggio Frequencies**

<http://www.redicecreations.com/specialreports/2006/01jan/solfeggio.html>

**Solfège**

<https://en.wikipedia.org/wiki/Solf%C3%A8ge>

### **Guido of Arezzo**

[https://en.wikipedia.org/wiki/Guido\\_of\\_Arezzo](https://en.wikipedia.org/wiki/Guido_of_Arezzo)

"ut-re-mi-fa-so-la" (do-re-mi-fa-so-la)

### **The Sound of Music - Rodgers and Hammerstein (1965)**

<https://youtu.be/pLm07s8fnzM>

### **GUIDO Music Notation**

[https://en.wikipedia.org/wiki/GUIDO\\_music\\_notation](https://en.wikipedia.org/wiki/GUIDO_music_notation)

### **Why GeoPhysics Depends on 528 Frequency Dynamics**

<http://www.528revolution.com/528-mathematics-and-geophysics/>

### **The Solfeggio Frequencies**

<https://www.smartlivingnetwork.com/nerdery/b/resonate-the-solfeggio-frequencies/>

### **Douglas G. Preston Toroidal Scale | 174 - 963 (Hz)**

<https://youtu.be/PJga1ONHhKE>

### **Inner Worlds Outer Worlds - documentary by Daniel Schmidt**

<http://www.innerworldsmovie.com/> - 4 part movie

### **Inner Worlds, Outer Worlds (2012) - with Turkish subtitles**

[https://youtu.be/PnHL\\_Qu16mk](https://youtu.be/PnHL_Qu16mk)

“Middle Way and Golden Mean”

### **The 6 Tones Of Creation Healing Frequencies**

<https://youtu.be/lepFcyLjbUc>

### **Solfeggio Frequency Meditation - All 9 Tones**

<https://youtu.be/zqaFe8sTo98>

### **Frequency : The Secrets & Science of Sound (2014)**

<https://youtu.be/h9TtsJ33kCA>

### **\*\*\*Frequency & The Law of Vibration\*\*\***

<https://youtu.be/XEX2-m8EabU>

### **174 Hz - Foundation**

<https://youtu.be/9JZiNdPNu3I>

### **Sounds of Seismic**

[www.sos.allshookup.org](http://www.sos.allshookup.org)

### **HAITI Chandelier Video**

<https://youtu.be/0kd04jRcshY>

### **IEI - Inner Earth Interpreter**

<https://i-e-i.wikispaces.com/>

### **SeismicSounds**

<https://soundcloud.com/seismicsounds>

\*\*\*\*\*  
**BUILDING TECHNIQUES**  
\*\*\*\*\*

**Lebbeus Woods;**

1999 Terrain - <http://www.lebbeuswoods.net/EARTHQUAKEtext.pdf>

2000 Horizon Houses - <http://www.lebbeuswoods.net/HORHOUSEStext.pdf>

**Ferrocement**

<http://en.wikipedia.org/wiki/Ferrocement>

<http://ferrocement.com/>

**Buddy Rhodes - Ferrocete Techniques**

<http://www.youtube.com/watch?v=weyT0Ht6SOM>

**Mortar Spraying**

<http://www.youtube.com/watch?v=gcHc-o1O4eQ&feature=related>

**Marshalltown Hopper Guns**

<http://www.marshalltown.com/>

**Open Source Ferrocement Hexayurt**

<http://www.jovoto.com/projects/300house/ideas/12712%20>

**Mortar Sprayer Oregon**

<http://www.mortarsprayer.com/>

**Rebuilding Haiti - Stucco**

[https://www.youtube.com/watch?](https://www.youtube.com/watch?v=JVh2USFdUwA&list=UU8Vkfj2L63cVV5qrPnIV0Cg&index=6)

[v=JVh2USFdUwA&list=UU8Vkfj2L63cVV5qrPnIV0Cg&index=6](https://www.youtube.com/watch?v=JVh2USFdUwA&list=UU8Vkfj2L63cVV5qrPnIV0Cg&index=6)

**Splatter Gun**

<http://www.youtube.com/watch?v=WTlaMftnWSU>

**Spider Lath Instead of Chicken Wire (LATH)**

<http://spiderlath.com/advantage.html>

*Furring Metal Lath (for Stucco to stick to)*

**Permalath (BASF)**

[www.permalath.basf.com/](http://www.permalath.basf.com/)

**About Ferrocete**

<http://www.ferrotechnologies.in/about-ferrocement.php>

**Stucco: Sand, Portland Cement, Lime and Water**

<http://en.wikipedia.org/wiki/Stucco>

**Dylan Toymaker Hexayurt Models**

<http://dylantoymaker.net/toybox/2010/10/20/hexayurt/>

**Hempcrete**

<https://en.wikipedia.org/wiki/Hempcrete>

**Hemplogic - Using Hemp in Construction**

<http://hemplogic.blogspot.com.au/2016/02/using-hemp-in-construction.html>



## Hemp Mortars - Recipe

[http://cms.esi.info/Media/documents/StAst\\_hempmortars\\_ML.pdf](http://cms.esi.info/Media/documents/StAst_hempmortars_ML.pdf)

## Building with Hemp/Lime FAQ's

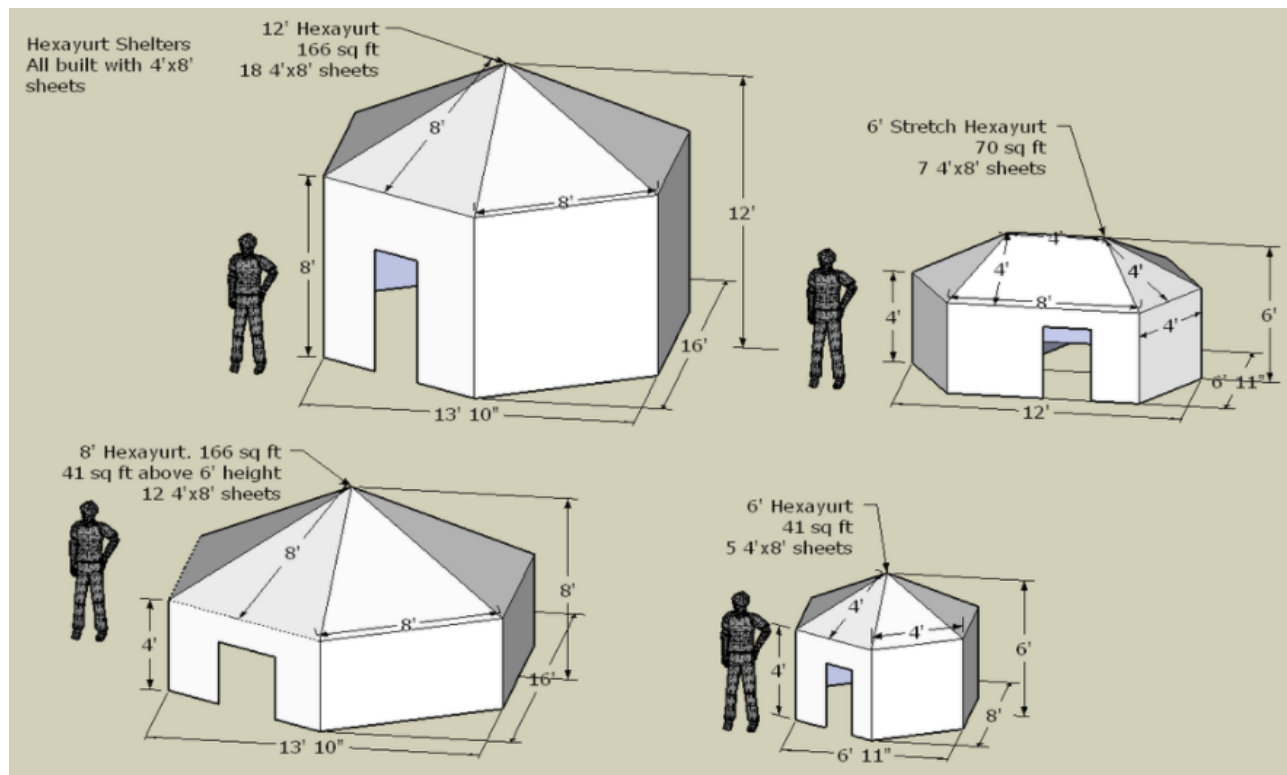
<http://www.hemp-technologies.com/page79/page79.html>

## Hempcrete FAQ (AUS)

[http://www.hempcrete.com.au/index.php?option=com\\_content&view=article&id=23&Itemid=24](http://www.hempcrete.com.au/index.php?option=com_content&view=article&id=23&Itemid=24)

## 3D Printing Hempcrete

<http://climatecolab.org/plans/-/plans/contests/2015/buildings/c/proposal/1305704>



## Hexayurt

<https://en.wikipedia.org/wiki/Hexayurt>

## The Hexayurt Project: Free Hardware housing for the world

<http://hexayurt.com/>

## The Hexayurt - Concept, Design and Construction

<http://files.howtolivewiki.com/hexayurt.com/MaketheHexayurtv071202.pdf>

\*\*\*\*\*  
**ADDITIONAL MATERIAL SOURCES**  
\*\*\*\*\*

**INSULATION Panels**

Tony McClanahan  
Cell: 818.468.7785  
Office: 818.558.5717  
tony@foamsalesandmarketing.com  
Foam Sales and Marketing (sells DOW)  
1005 West Isabel Street  
Burbank, California 91506

**TAPE**

Anson Christiansen  
[anson@tapejungle.com](mailto:anson@tapejungle.com)  
+1 (877) 284-4781  
+1 (305) 231-8273  
[orders@tapejungle.com](mailto:orders@tapejungle.com)

**RATCHET STRAPS**

(BLACK)

<http://www.shipperssupplies.com/EndlessLoopStraps/2EndlessRatchetStrapwBlackRatchet/>  
<http://www.shipperssupplies.com/RatchetTieDownStraps/2HeavyDutyRatchetStrapwithLoops/>  
<http://www.shipperssupplies.com/RatchetTieDownStraps/2RatchetStrapwithJHooksandDRings/>

**MATERIALS LIFTER**

Quality Equipment Rentals  
<http://www.qerentals.com/contact.php>  
Material Lift Genie 24' - \$195 p/w  
Inglewood - 15 Miles from Silverlake  
<http://www.qerentals.com/productDetails.php?id=19874>

**Current DOMUS Storage**

Big Art Labs  
1641 Naud St, 90012  
[dandasmann@gmail.com](mailto:dandasmann@gmail.com)