

The new VFlex architecture from Gemme Audio provides never heard of acoustic performance. This unrivaled loudspeaker construction technology defies the very laws of physics by extending low frequency reproduction below the human hearing threshold of 20 Hz, using small driver units.

The first model featuring our exclusive VFlex architecture, the *VIVACE*, uses a single 3.5" full range Fostex driver in a 1.5 cu. ft. small tower enclosure, to cover the frequency range from 20 to 20 000 hertz. No other single-cone loudspeaker can accomplish this level of performance, regardless of size or cost.

To harness this performance, extraordinary engineering went into the design and construction of all VFlex enclosures. Not only of stunning beauty, every single part was designed to work as part of the VFlex acoustic system.

MACHINED FRONT AND BACK BAFFLES

The revolutionary VFlex architecture features CNC machined front and back baffles assembly. Each baffle, front and back, is meticulously sculpted to serve music reproduction. The slanted sides of front baffles reduce diffraction modes, while the curved surface is machined with V grooves to break surface vibrations. The baffle width and density is designed to spread the main resonance frequency, so no peaking frequency can be associated with the massive baffle construction.

BEAUTY IS MORE THAN SKIN DEEP

All baffles are also machined on the inside. Even though you'll never be able to admire the complex inner construction, we took the extra step of machining the inside panels as well. Contrarily to run of the mill speaker boxes, inside baffle walls are machined with resonance dispersing focal channels of different shape, width and thickness. This effectively breaks and spreads standing sound waves. Also, no two parallel surfaces are to be found inside the enclosure and resonances are perfectly controlled.

FORMALDEHYDE FREE MATERIALS

Instead of settling with cheap and harmful MDF material bounded with formaldehyde glues, we use exclusively materials that are risk free for the environment, your own health and that of our workers. The low quality MDF used in some parts of the world contains chemicals that are proven to induce cancer. Formaldehyde-free MDF is more expensive, but safe for you and your family.

TOTAL ENGINEERING

All materials used in the construction of the VFlex enclosure were carefully selected to enhance the musical experience. We use only top quality formaldehyde-free MDF, agglomerated wood panels and solid Canadian maple. Front baffles are 2 inches thick while pressure load points are more than 2 inches thick, with elaborate wood-particle/elastomer/solid maple side panels.

CANADIAN SOLID MAPLE

All VFlex enclosures are entirely hand built in Canada with canadian sourced material. The maple leaf is the emblem of Canada because of largely available and renewable maple trees. Not only maple is incredibly strong, it also has unique acoustical properties. For example, the side panels of the VFlex enclosures is made of multiple solid maple parts, hand selected and assembled to form the cabinet walls. The maple wood is oven-dried and parts are assembled with a strict 8% humidity content. All parts are hand fitted and assembled upside/downside, inside/outside. This means that the force of one part is cancelled by the force of the other part to reach perfect equilibrium, and offer perfect sound characteristics. Again, thickness varies constantly to spread any unwanted resonances.

SPECIAL ADHESIVES

Special adhesives are used throughout the construction. Incredibly strong but at the same time risk-free for the environment and health, all adhesives are also rated for food preparation products (such as butcher blocks), in both dry and humid conditions.

PROPRIETARY DAMPING MATERIAL

Additional damping inside the enclosure is achieved by using a special compound material developed by Gemme Audio for use in all VFlex enclosures. Made of a special water-based latex bounding agent, the compound contains silicate particles for superior damping properties. Application is done by hand and the compound is also sculpted to break and damp resonances.

EXQUISITE FINISH

Front and rear baffles are hand sanded and finished with 6 coats of lacquer. All solid maple parts are also hand sanded, hand stained and 8 coats of high gloss lacquer are applied.

PACKAGING

Extraordinary care went into the fabrication of all VFlex enclosure. Equal care went into the design of the packaging as well. Boxes are super-duty double wall construction and memory foam is used for further protection. Instead of using glue to form urethane parts, a special jig-saw die was developed to form a modular construction.

CONNECTOR PLATES

Connector plates are machined from heavy gauge aluminum, anodised, then clear lacquered, epoxy printed with an additional clear lacquer applied at the end. The plates are encased in the rear baffle for a perfect seal, and 8 machine screws further secure each plate to the enclosure.

MACHINED STEEL TRIPOD FOOTING

To provide adequate grounding, the total weight of each enclosure stands on three machined toes. The tripod arrangement is superior to the usual four toes because even if the floor surface is uneven, the total weight will always be evenly distributed. Two of the three toes are adjustable to achieve perfect level and adequate rake. Because the surface of each toe tip is very small, the weight to surface ratio is extremely high to provide perfect floor coupling. Electroplating is performed to inhibit rust formation and the plated surface is clear lacquered for improved resistance.

HIGH QUALITY CONNECTORS

Cardas connectors are used on all VFlex enclosures for optimal cable interface.

VFLEX MODELS

Two VFlex models are currently available. Both models will reach 20 Hz and below, but the incredibly full-bodied, tight and articulate bass output is only part of the story. They will both delight your senses with exceptionally accurate music reproduction, from the low rumble of a pipe organ low C to the subtle shadings of cymbal type, size and brushwork. Likewise, they will faithfully reproduce all the explosive dynamics and sense of space found in live music.

- **Vivace:** *single-driver design using Fostex FE108E Sigma drivers. Vivace is engineered to perform admirably in rooms ranging from 100 to 200 square feet.*
- **Tanto:** *two-way design using one 6.5" wool-filled paper cone mid/bass driver and a high resolution Ring Radiator Tweeter. Perfect for all but very large rooms.*