Building scheme for EZT

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1. Periodic Building Unit:

**EZT** can be built using units of 24 T atoms (Figure 1(a)). The T24-unit consists of two different fused T14-units. The first T14-unit (in bold) consists of a 3-fold (1,3,5)-connected double 6-ring "capped" on each side by a single T atom (see also **AFS** and **BPH**). The second T14-unit is composed of a 4-fold (1,2,4,5)-connected double 6-ring with a "handle" (see also **IFR**). The two-dimensional Periodic Building Unit (PerBU) is obtained by connecting T24-units, related by \( \frac{1}{2}(a + b + c) \), through 4-rings. The PerBU is shown in Figure 1(b).

Figure 1. (a): Fusion of T14-units into the T24 building unit viewed along \( b \) (top) and along \( c \) (bottom); (b): PerBU viewed along \( c \) (top) and along \( b \) (bottom).
2. Connection mode:

Neighboring layers, related by pure translation along $b$, are connected along $b$ through 4-rings as shown in Figure 2.

Figure 2. Connection mode (and unit cell content) in EMH viewed along $c$ (top) and parallel projection along $b$ (bottom).

3. Projections of the unit cell content: See Figure 2.

4. Channels and/or cages:

Sinusoidal 12-ring channels are parallel to [010] and highly elliptical 8-ring channels are parallel to [001]. Pairs of 8-ring channels are connected along [100] through 12-ring channels. The interconnection of channels is depicted in Figure 3 on next page. The pore descriptor is added.
5. Supplementary information:

Other framework types containing (modified) double 6-rings (D6Rs)
Several other framework types can be built using (modified) D6Rs.
In the INTRO pages links are given to descriptions of other framework types containing (modified) D6Rs (choose: Double 6-rings). There is also a link provided to a summary of the Periodic Building Units used in the building schemes of these framework types (choose: Appendix; Figure 7).