`AGG_TRANSFORM_NULL`	$\mathbf{x}$	
`AGG_TRANSFORM_REVERSE`	$[-x, y]$	reverse direction of curve
`AGG_TRANSFORM_PLANE_ROTATE`	$\mathbf{x}_0 + (\mathbf{x} - \mathbf{x}_0)\mathbf{R}^T$	rotate about $\mathbf{x}_0$
`AGG_TRANSFORM_SHRINK`	$\mathbf{x}_0 + s(\mathbf{x} - \mathbf{x}_0)$	scale about $\mathbf{x}_0$
`AGG_TRANSFORM_SHIFT`	$\mathbf{x} + \Delta\mathbf{x}$	3D translation by $\Delta\mathbf{x}$
`AGG_TRANSFORM_SCALE`	$s\mathbf{x}$	global scale in plane

Table 1: Transforms in order of application to a shape

Closed curves ("shapes") used to define cross-sections are parameterized using x, $-1 \leq x \leq 1$ with $x < 0$ defining the lower portion of the curve and $x > 0$ the upper. The variable runs continuously from the trailing edge along the lower surface to the leading edge and back to the trailing edge. Coordinates are calculated as

$$y_U = x^{n_1}(1 - x)^{n_2} \sum_{i=0}^{n} s_i^{(U)} S_{n,i}(x), \tag{1}$$

$$y_L = -|x|^{n_1}(1 - |x|)^{n_2} \sum_{i=0}^{n} s_i^{(L)} S_{n,i}(|x|). \tag{2}$$

"Aerofoils" are defined similarly but in terms of the thickness distribution, the trailing edge thickness, and the camber line.