

### 3.29: Zonal reflection conditions

The zonal reflection conditions are the general reflection conditions due to the presence of glide planes. The resulting conditions apply only to two dimensional sets of reflections, *i.e.* to reciprocal-lattice nets containing the origin (such as  $hk0$ ,  $h0l$ ,  $0kl$ ,  $hhl$ ). For instance, for a glide plane parallel to  $(001)$ :

type of reflection	reflection condition	glide vector	glide plane
$0kl$	$k = 2n$	$\mathbf{b}/2$	$b$
	$l = 2n$	$\mathbf{c}/2$	$c$
	$k + l = 2n$	$\mathbf{b}/2 + \mathbf{c}/2$	$n$
	$k + l = 4n$ $k, l = 2n$	$\mathbf{b}/4 \pm \mathbf{c}/4$	$d$

The zonal reflection conditions are listed in Table 2.2.13.2 of *International Tables of Crystallography, Volume A*.

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