τ_{ij} [deg]	β-strand pair	rigor-like min	post-rigor NMSM	post-rigor min
τ_{12}	$\beta_1\beta_2$	26.0	26.2	25.9
τ_{23}	$\beta_2\beta_3$	10.5	11.5	9.8
τ_{13}	$\beta_1\beta_3$	36.5	37.8	35.6
$\Delta\tau$		0.0	1.3	0.8

TABLE S8: Twist values for pairs of neighboring strands in the converter β-sheet. The values were computed for the energy-minimized rigor-like and post-rigor structures, and the NMSM post-rigor conformation. $\Delta\tau$ values relative to the rigor-like ($\Delta\tau = |\tau_{13}(\text{rigor}) - \tau_{13}(\text{X})|$) show that the three-stranded β-sheet is fairly rigid, so that it allows for efficient structural communication between the N and L50 subdomains.