glass is not in the ground state, & has some residual entropy due to frozen-in disorder.

xtal is the crystaline ground state of the solid with $S_{xtal}(T=0) = 0$

$$S_{residual} = S_{glass}(T=0) - S_{xtal}(T=0)$$

$$= \underbrace{S_{glass}(T=0) - S_{liq}(T_\ell)}_{} + \underbrace{S_{liq}(T_\ell) - S_{xtal}(T=0)}_{}$$

$$= \int_{0:\,glass}^{T_\ell} \frac{dQ}{T} \qquad\qquad = \int_{0:\,xtal}^{T_\ell} \frac{dQ}{T}$$