$\vec{v}^h = \mathcal{S}^{\nu_1}(v^h, \vec{f}^h)$

$\vec{f}^{2h} = I_h^{2h}(\vec{f}^h - A^h \vec{v}^h)$

$\vec{v}^{2h} = \vec{0}; \quad \vec{v}^{2h} = \mathcal{S}^{\nu_1}(v^{2h}, \vec{f}^{2h})$

$\vec{f}^{4h} = I_{2h}^{4h}(\vec{f}^{2h} - A^{2h} \vec{v}^{2h})$

$\vec{v}^{4h} = \vec{0}; \quad \vec{v}^{4h} = \mathcal{S}^{\nu_1}(v^{4h}, \vec{f}^{4h})$

$\vec{f}^{8h} = I_{4h}^{8h}(\vec{f}^{4h} - A^{4h} \vec{v}^{4h})$

$\vec{v}^{8h} = \vec{0}; \quad \vec{v}^{8h} = \mathcal{S}^{\nu_1}(v^{8h}, \vec{f}^{8h})$

$\vec{v}^{Lh} = \left(A^{Lh}\right)^{-1} \vec{f}^{Lh}$

$\vec{v}^h = \mathcal{S}^{\nu_2}(v^h, \vec{f}^h)$

$\vec{v}^h = \vec{v}^h + I_{2h}^h(\vec{v}^{2h})$

$\vec{v}^{2h} = \mathcal{S}^{\nu_2}(v^{2h}, \vec{f}^{2h})$

$\vec{v}^{2h} = \vec{v}^{2h} + I_{4h}^{2h}(\vec{v}^{4h})$

$\vec{v}^{4h} = \mathcal{S}^{\nu_2}(v^{4h}, \vec{f}^{4h})$

$\vec{v}^{4h} = \vec{v}^{4h} + I_{8h}^{4h}(\vec{v}^{8h})$

$\vec{v}^{8h} = \mathcal{S}^{\nu_2}(v^{8h}, \vec{f}^{8h})$