(1) Calculate equilibrium solution with regards to rigid body modes	$\boldsymbol{\lambda}_{\mathbf{N}0} = \mathbf{AG}(\mathbf{G}^T\mathbf{AG})^{-1}\mathbf{e}$
(2) Projector to natural subspace	$\mathbf{P} = \mathbf{I} - \mathbf{AG}(\mathbf{G}^T\mathbf{AG})^{-1}\mathbf{G}^T$
(3) Preconditioner	$\mathbf{S} = \sum_s \mathbf{S}^{[s]}$
(4) Calculate residual(gap) in natural subspace	$\mathbf{r}_0 = \mathbf{P}^T(\mathbf{d} - \mathbf{F}\boldsymbol{\lambda}_{\mathbf{N}0})$
(5) Calculate resulting forces (preconditioning)	$\mathbf{z} = \mathbf{S}\mathbf{r}_0,$
(6) Remove rigid body-components of forces	$\mathbf{w}_0 = \mathbf{P}\mathbf{z}_0$
(7) Initialize	$\boldsymbol{\lambda}_{\mathbf{F}0} = \mathbf{0}, i = 0$
(8) While not converged	$\sqrt{\mathbf{r}_i^T\mathbf{z}_i} > \epsilon$
(9) Compute gap-change due to forces $\mathbf{w}_i$	$\mathbf{q} = \mathbf{F}\mathbf{w}_i$
(10) Auxiliary parameter	$\delta_i = {\mathbf{q}_i}^T\mathbf{w}_i$
(11) Auxiliary parameter	$\gamma_i = \mathbf{r}_i^T\mathbf{z}_i$
(12) Step in the new direction	$\boldsymbol{\lambda}_{\mathbf{F}i+1} = \boldsymbol{\lambda}_{\mathbf{F}i} + (\gamma_i/\delta_i)\mathbf{w}_i$
(13) Gap after force step	$\mathbf{r}_{i+1} = \mathbf{r}_i - (\gamma_i/\delta_i)\mathbf{P}^T\mathbf{q}_i$
(14) Calculate resulting forces (preconditioning)	$\mathbf{z}_{i+1} = \mathbf{S}r_{i+1}$
(15) Remove rigid body-components of forces	$\mathbf{w}_{i+1} = \mathbf{P}\mathbf{z}_{i+1}$
(16) Loop over previous iterations	for: $0 \leq j \leq i$
(17) Compute factor	$\phi_{i,j} = \mathbf{q}_j^T\mathbf{w}_{i+1}$
(18) Orhorgonalize to direction j	$\mathbf{w}_{i+1} \leftarrow \mathbf{w}_{i+1} - (\phi_{i,j}/\delta_j)\mathbf{w}_j$
(19) Increase iteration counter	$i \leftarrow i + 1$
(20) Compute total interface forces	$\boldsymbol{\lambda} = \boldsymbol{\lambda}_{\mathbf{N}0} + \boldsymbol{\lambda}_{\mathbf{F}i}$