I am interested in solving a large system with block Gauss-Seidel Iterative Method. Suppose I have the following block matrix A for a system $Ax = B$:

$$\begin{pmatrix} A_{EE} & A_{EF} & A_{ET} \\ A_{FE} & A_{FF} & A_{FT} \\ A_{TE} & A_{TF} & A_{TT} \end{pmatrix} \begin{pmatrix} U_E \\ U_F \\ U_T \end{pmatrix} = \begin{pmatrix} f_E \\ f_F \\ f_T \end{pmatrix}$$

where $V(T) = V_1^E(T) \oplus V_2^F(T) \oplus V_3^T(T)$ and the (small) sub-spaces $V_1^E(T), V_2^F(T)$, and $V_3^T(T)$ are generated by basis functions associated with edges, faces, and cells:

$V_1^E(T)$ on e_{ij}	$V_2^F(T)$ on $F_\ell = F_{ijk}$	$V_3^T(T)$
$\lambda_i \nabla \lambda_j - \lambda_j \nabla \lambda_i$	$\lambda_i \lambda_j \nabla \lambda_k - \lambda_j \lambda_k \nabla \lambda_i$	$\lambda_i \lambda_j \lambda_k \nabla \lambda_\ell - \lambda_j \lambda_k \lambda_\ell \nabla \lambda_i$
	$\lambda_j \lambda_k \nabla \lambda_i - \lambda_k \lambda_i \nabla \lambda_j$	$\lambda_j \lambda_k \lambda_\ell \nabla \lambda_i - \lambda_k \lambda_\ell \lambda_i \nabla \lambda_j$
		$\lambda_k \lambda_\ell \lambda_i \nabla \lambda_j - \lambda_\ell \lambda_i \lambda_j \nabla \lambda_k$

The matrix A is square. Also the matrices A_{EE}, A_{FF}, and A_{TT} are square, but not the others.

I am interested in solving the following system:

$$\left(\begin{array}{c|cc} A_{EE} & 0 & 0 \\ \hline A_{FE} & A_{FF} & A_{FT} \\ A_{TE} & A_{TF} & A_{TT} \end{array}\right) \left(\begin{array}{c} U_E \\ \hline U_F \\ U_T \end{array}\right) = \left(\begin{array}{c} f_E \\ \hline f_F \\ f_T \end{array}\right)$$

So, Is there any way in NGSolve to use the block Gauss-Seidel Iterative Method in solving this system ?. I am grateful for any explanation.