



$$\begin{aligned}
 & \int_K c(x) \varphi_j(x) \varphi_i(x) dx \quad M_{ij}^K \\
 &= \int_R c(T_K(\hat{x})) \hat{\varphi}_j(\hat{x}) \hat{\varphi}_i(\hat{x}) |\det J_K(\hat{x})| d\hat{x} \\
 &\approx \sum_{\substack{1 \\ \text{quadrature}}}^{n_{qp}} c(T_K(\hat{\xi}_e)) \hat{\varphi}_j(\hat{\xi}_e) \hat{\varphi}_i(\hat{\xi}_e) \cdot \\
 &\quad \cdot \underbrace{|\det J_K(\hat{\xi}_e)| \hat{w}_e}_{J \times W}
 \end{aligned}$$

where $(\hat{\xi}_e, \hat{w}_e)_{e=1}^{n_{qp}}$ quadr. nodes and weights