$$\frac{\begin{array}{c} v \text{ fresh} \\ \Gamma; \mathcal{C}^k; v \to \sigma^k \vdash^e e_1 : \sigma_a \to \sigma \rightsquigarrow \mathcal{C}_f \\ \Gamma; \mathcal{C}_f; \sigma_a \vdash^e e_2 : \_ \rightsquigarrow \mathcal{C}_a \end{array}}{\Gamma; \mathcal{C}^k; \sigma^k \vdash^e e_1 \ e_2 : \mathcal{C}_a \sigma \rightsquigarrow \mathcal{C}_a} \ (\text{E.APP}_{HM})$$