Suppose that the distinguished basis $B$ of a table algebra is a union of $n$ proper closed subsets (whose intersection we denote as $C$). Our main result is that if all the positive structure constants of the standard quotient (double coset) basis $B//C$ are at least 1, then the order (valency) $\sigma(B//C)$ is bounded above by a function of $n$. This generalizes a result of B. H. Neumann for finite groups, and is applied to character rings of finite groups and to association schemes. (Received February 26, 2013)