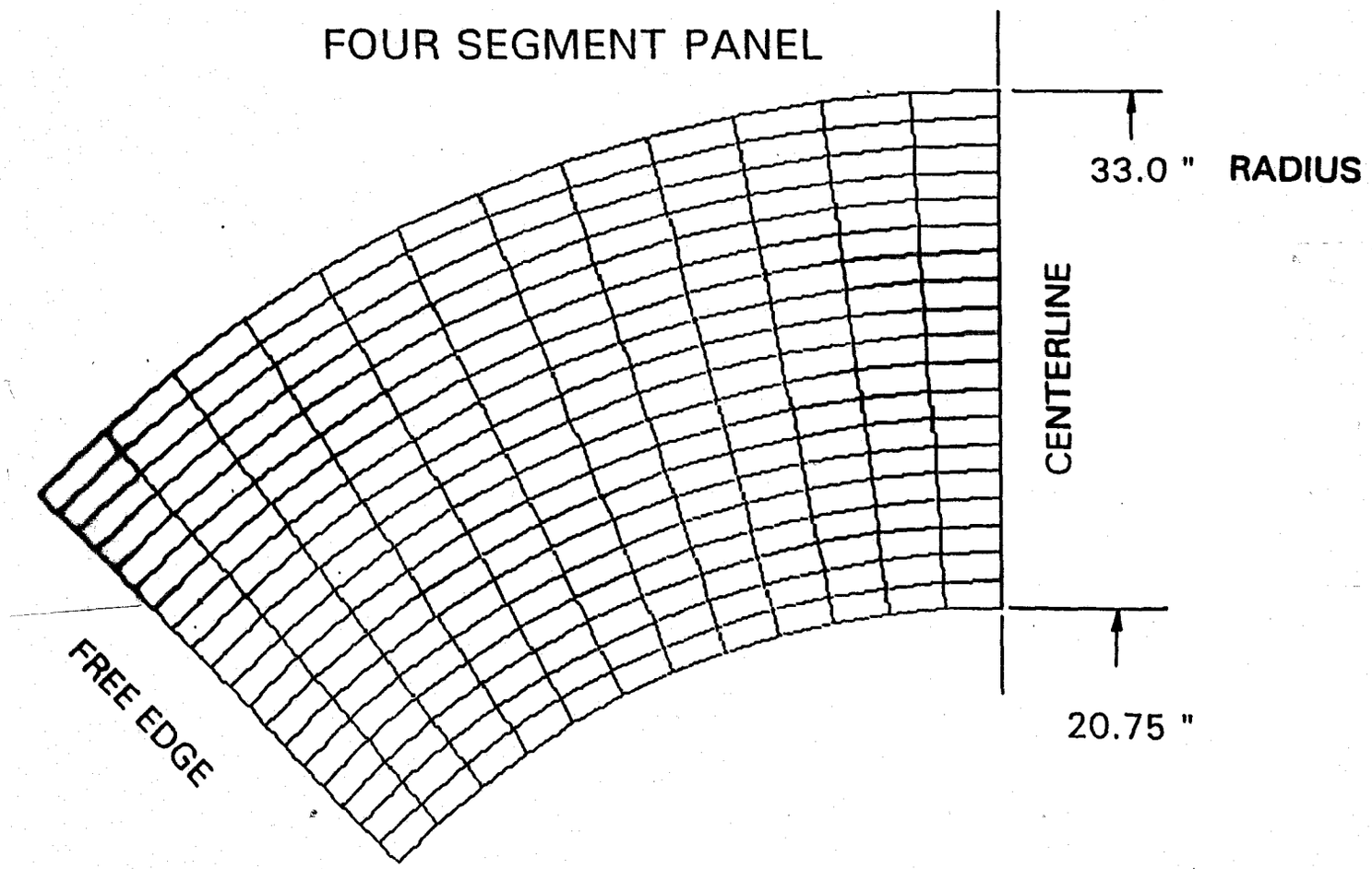FINITE ELEMENT MODEL: MODIFIED BACKPLATE