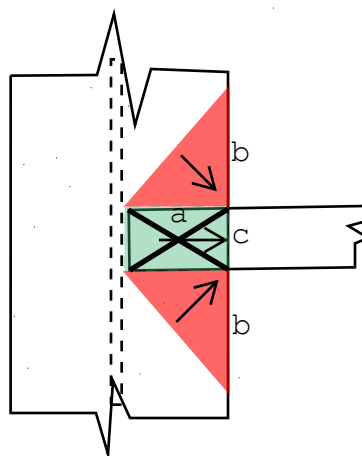


FAILURE MODE A



FAILURE MODE B

E.W.  $0.5R$   
 I.W.  $m(4a/b + 4b/a + c/a)$

$0.5R$   
 $m(4a/b + 2b/a + c/a)$

$dIW/db \quad m(-4a/b^2 + 4/a)$

$m(-4a/b^2 + 2/a)$

$b(\text{crit}) \quad a$

$1.414a$

I.W.  $m(4 + 4 + c/a)$

$m(4 + 2.828 + c/a)$

Assume that  $c = a$  then:

I.W. =  $9 \cdot m$

$7.828 \cdot m$

Equating Internal and External Work,

$m \text{ required} = 0.5R/9 = 0.0555R$

$0.5R/7.828 = 0.0638R$