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Quiz

- A Fiber failure
- B Delamination
- C Matrix crack
- D Debonding

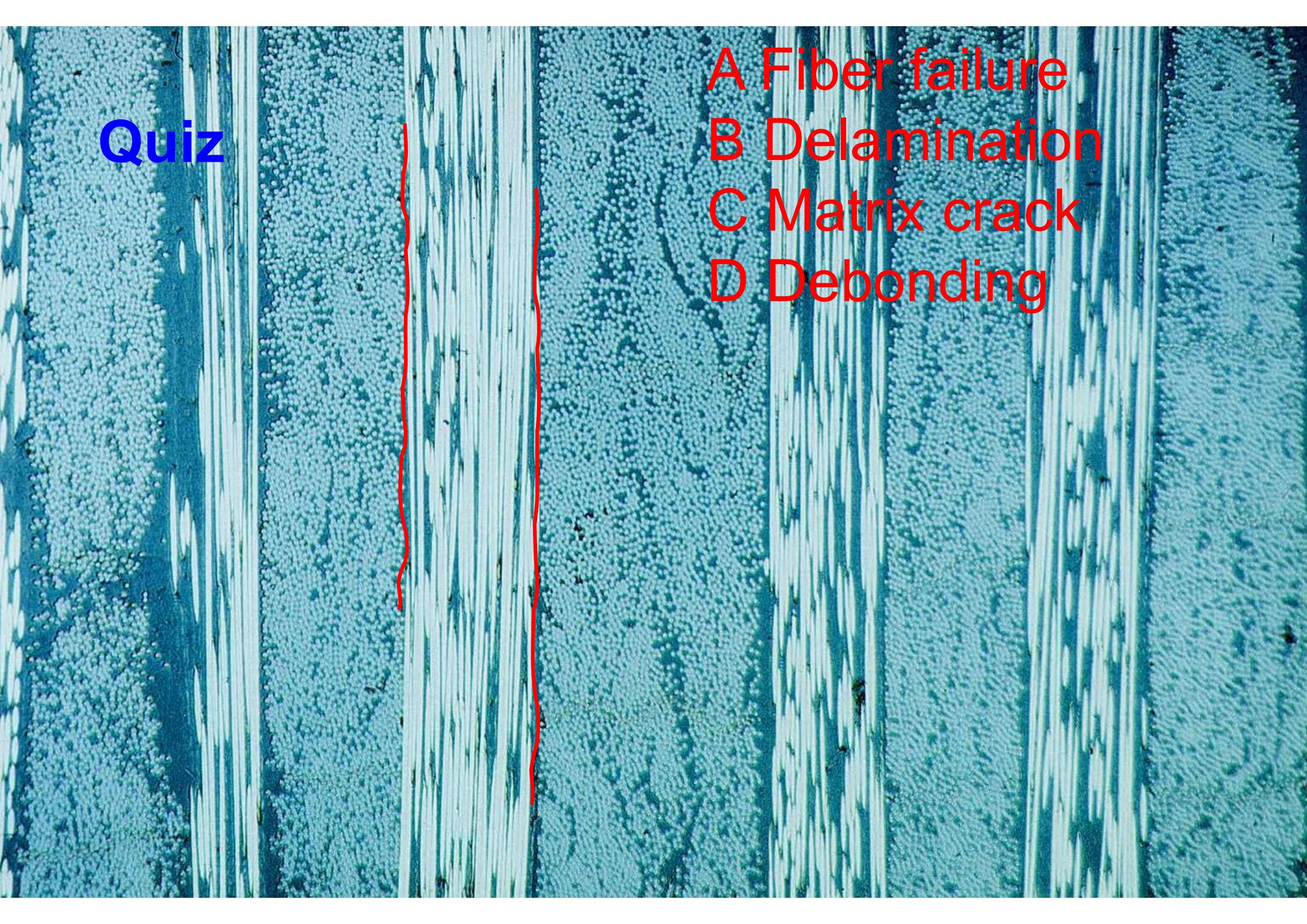


Answer to Quiz

- A Fiber failure
- B Delamination
- C Matrix crack
- D Debonding



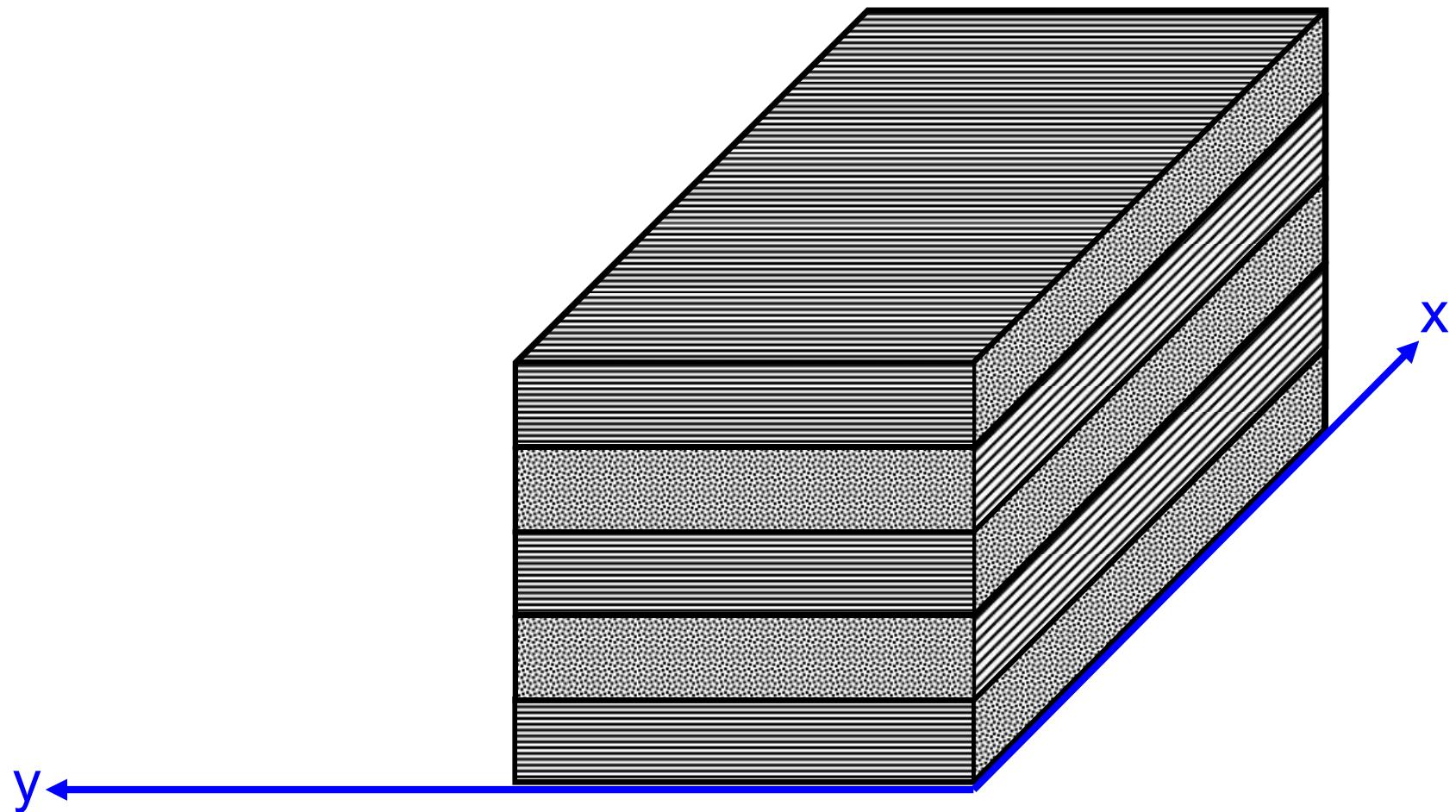
Quiz

- 
- A composite material micrograph showing a vertical interface between two layers. On the left, a red curly brace highlights a vertical column of fibers. A red vertical line marks the interface. To the right of the interface, the fibers are broken and pulled out, indicating fiber failure. The matrix appears fractured and debonded from the fibers.
- A Fiber failure
 - B Delamination
 - C Matrix crack
 - D Debonding

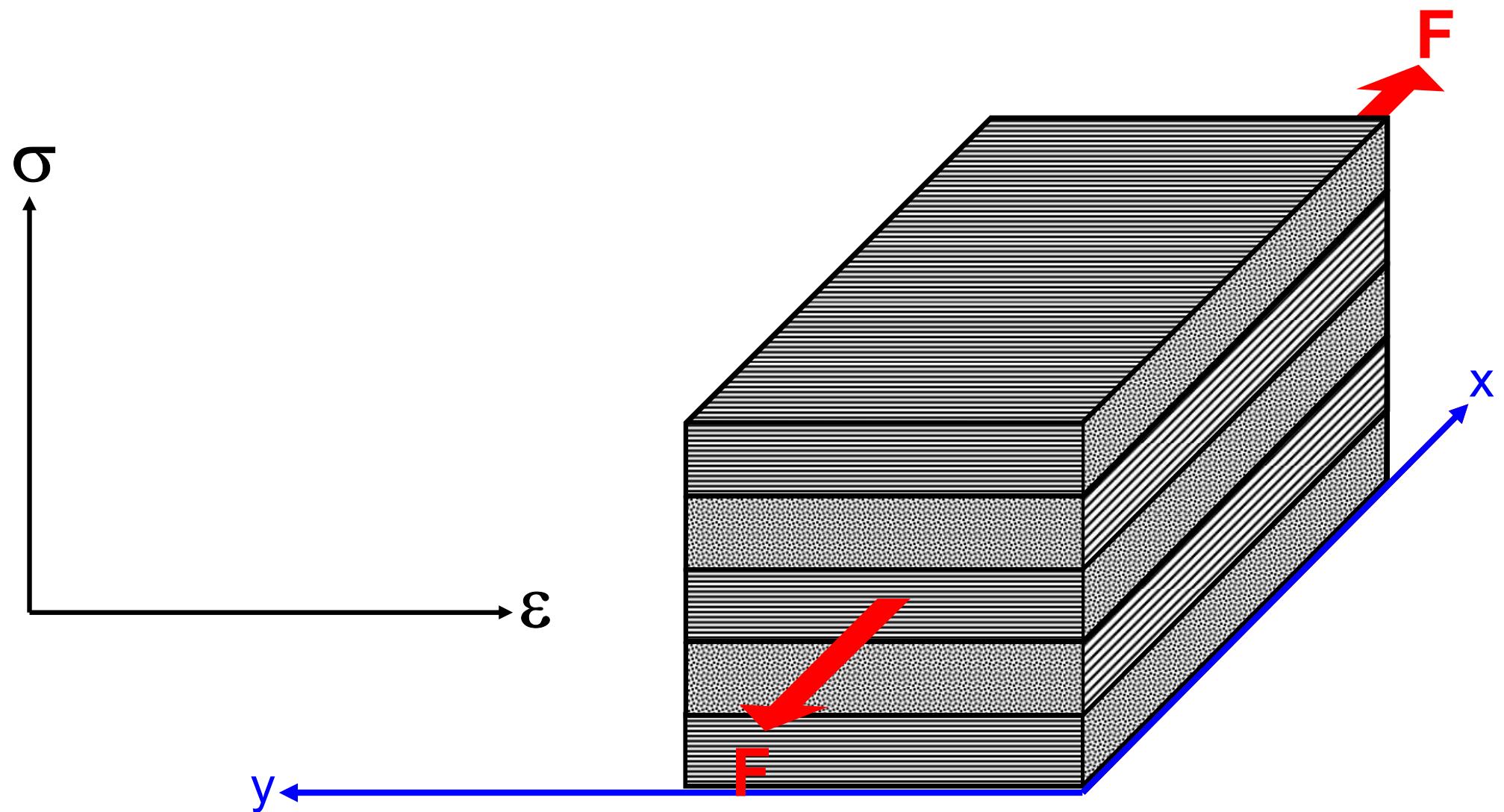
Answer to Quiz

- A Fiber failure
- B Delamination
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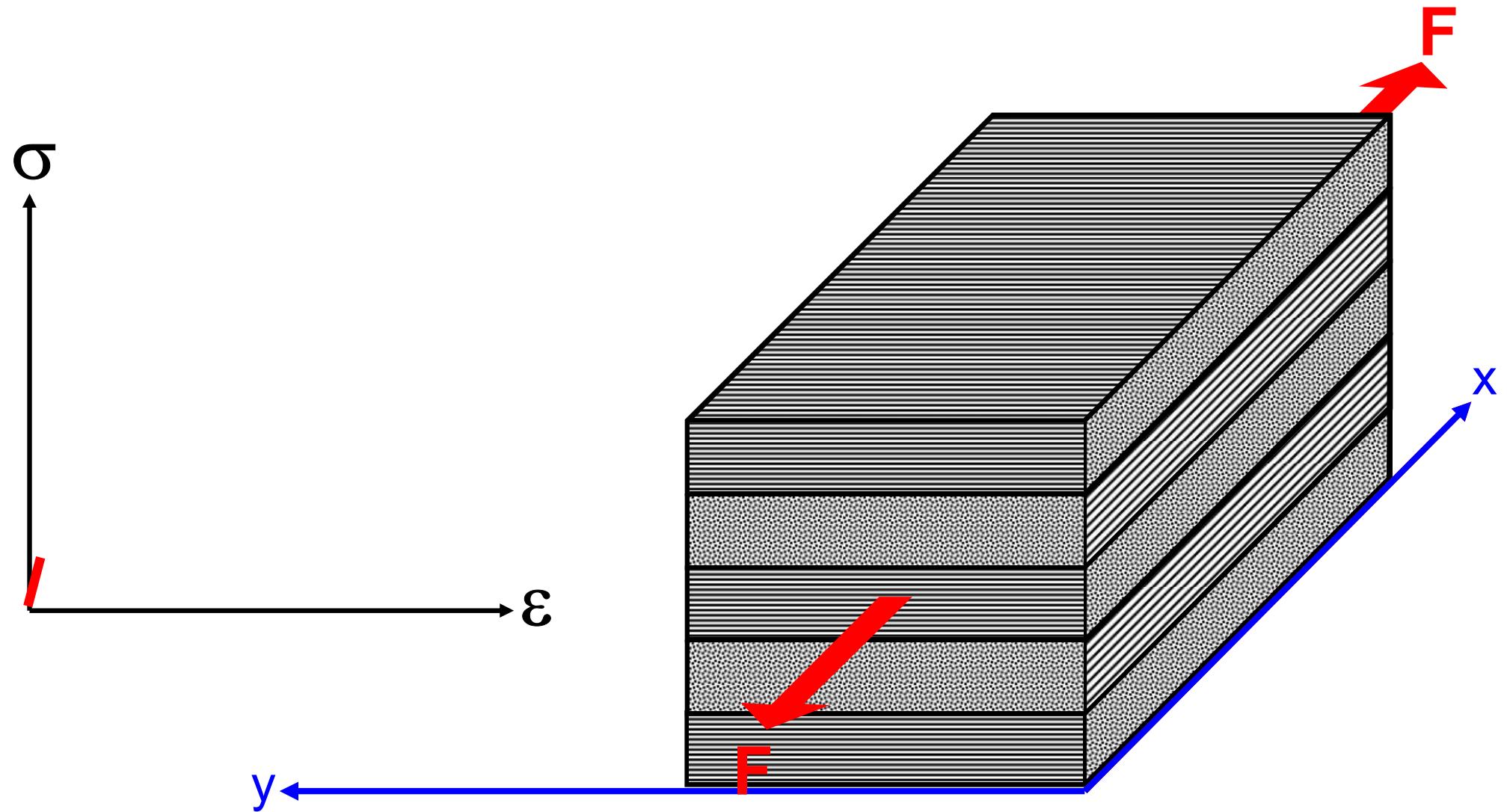
Symmetric Crossply Laminate $(90^\circ/0^\circ/90^\circ/0^\circ/90^\circ)$



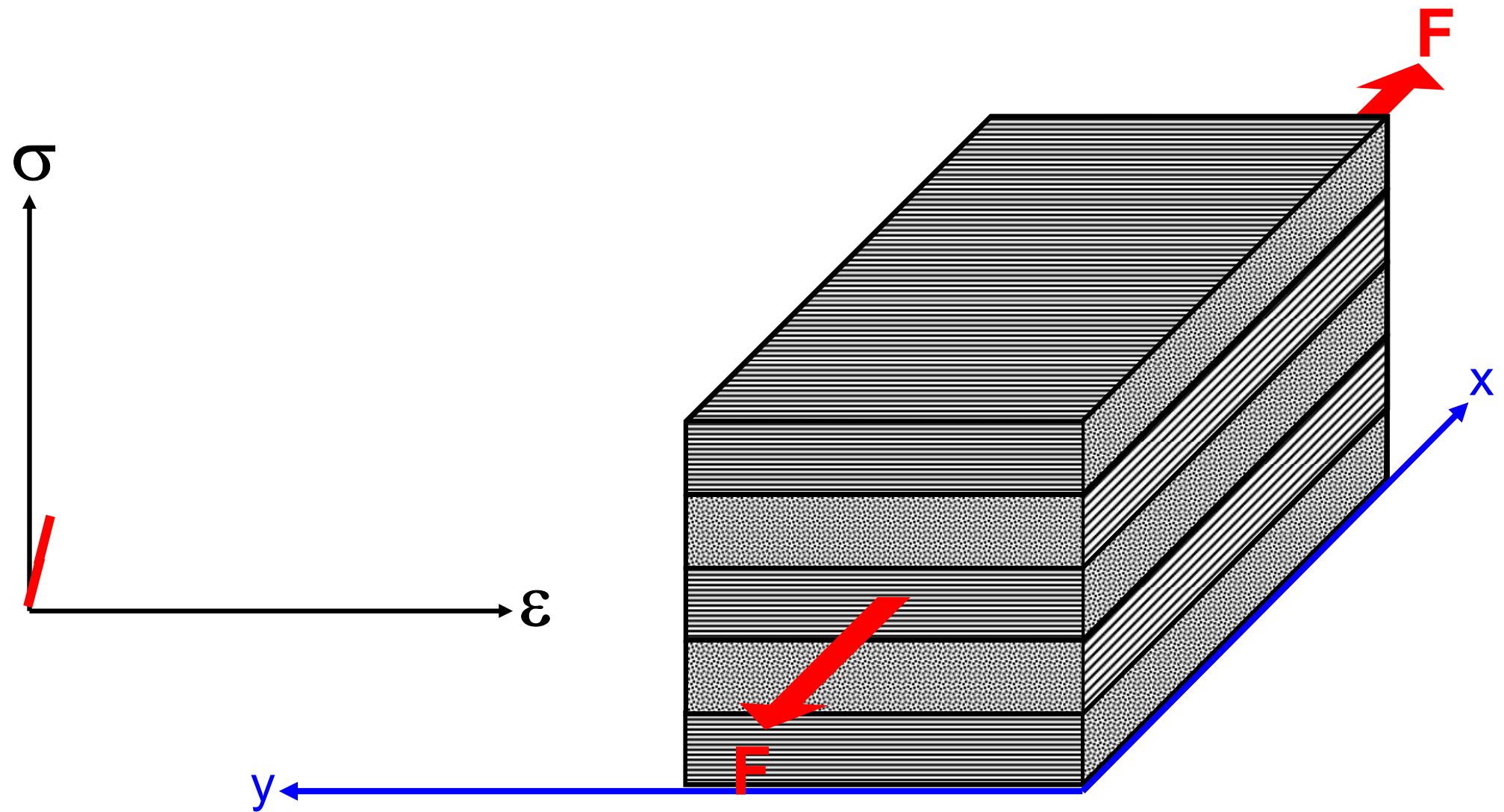
Nonlinear Failure Analysis



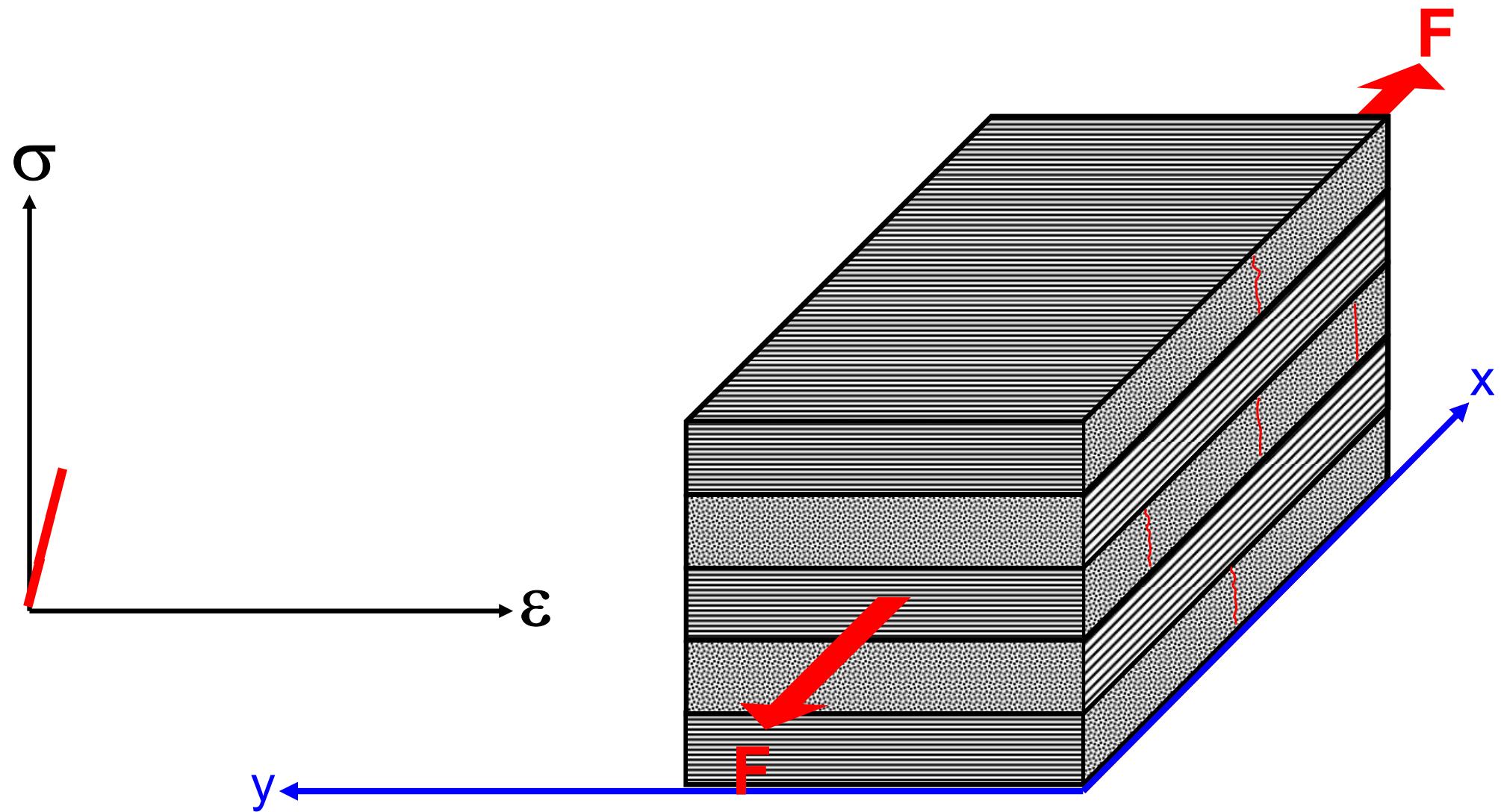
Nonlinear Failure Analysis



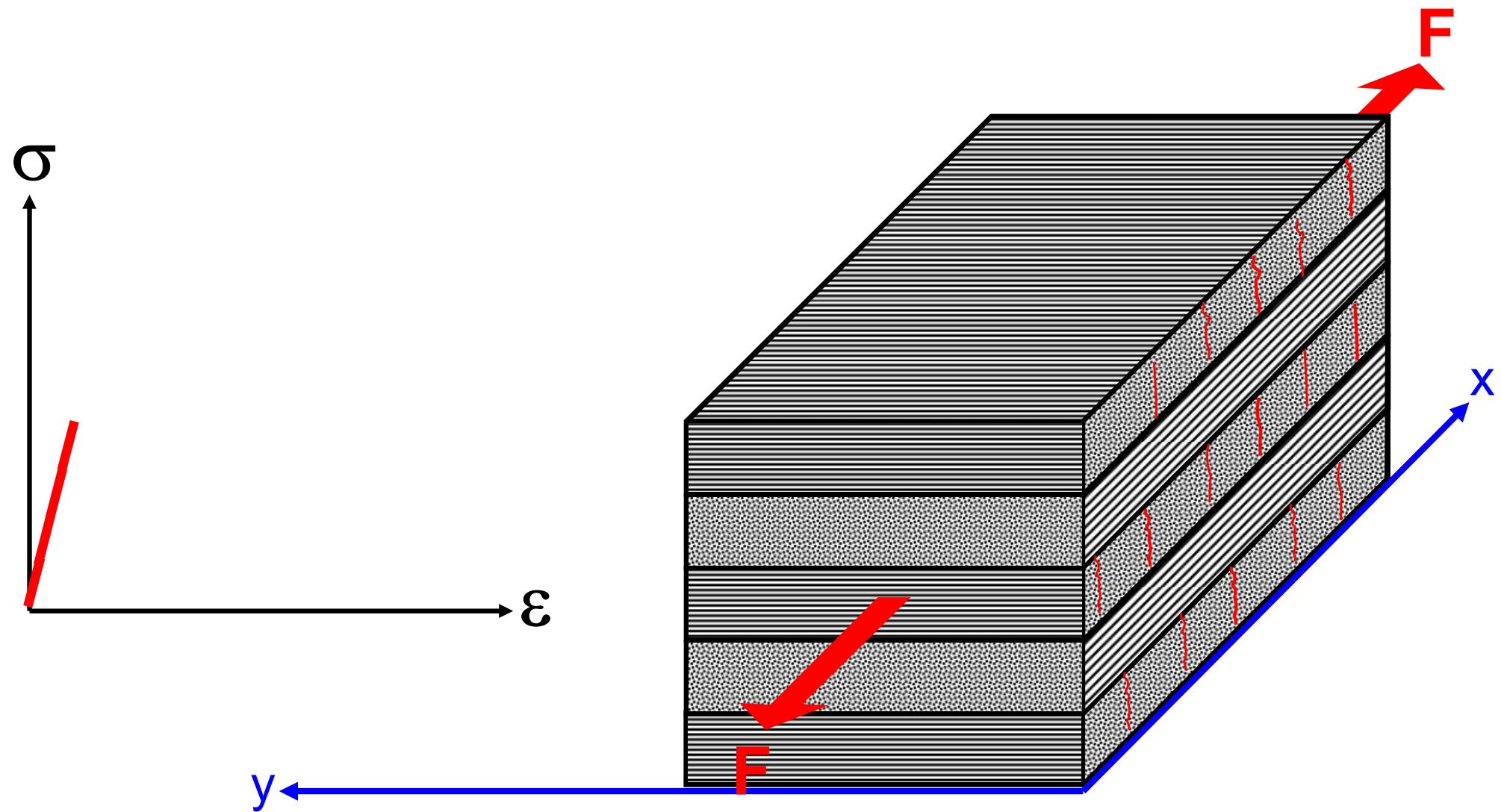
Nonlinear Failure Analysis



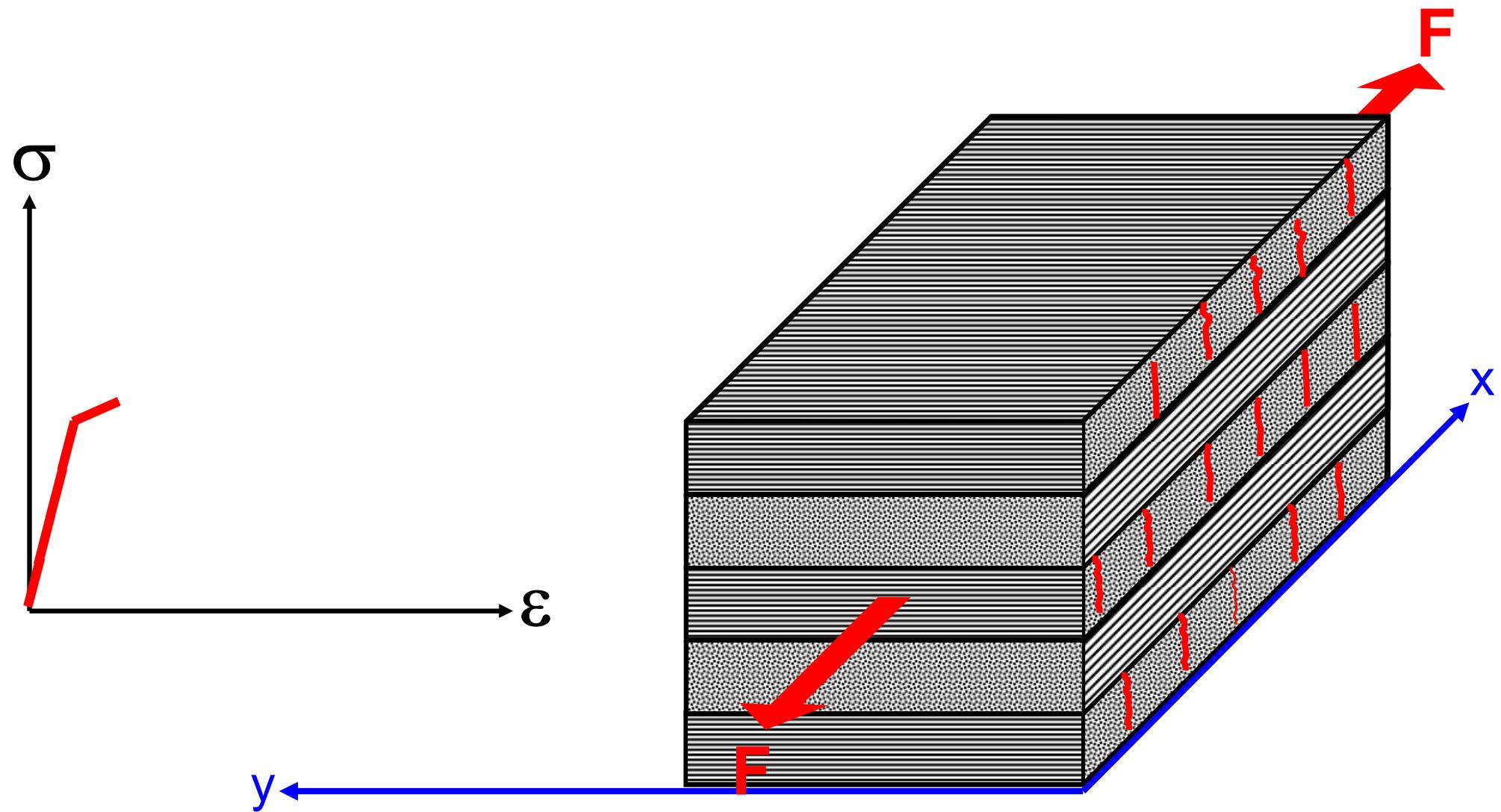
Nonlinear Failure Analysis



Nonlinear Failure Analysis

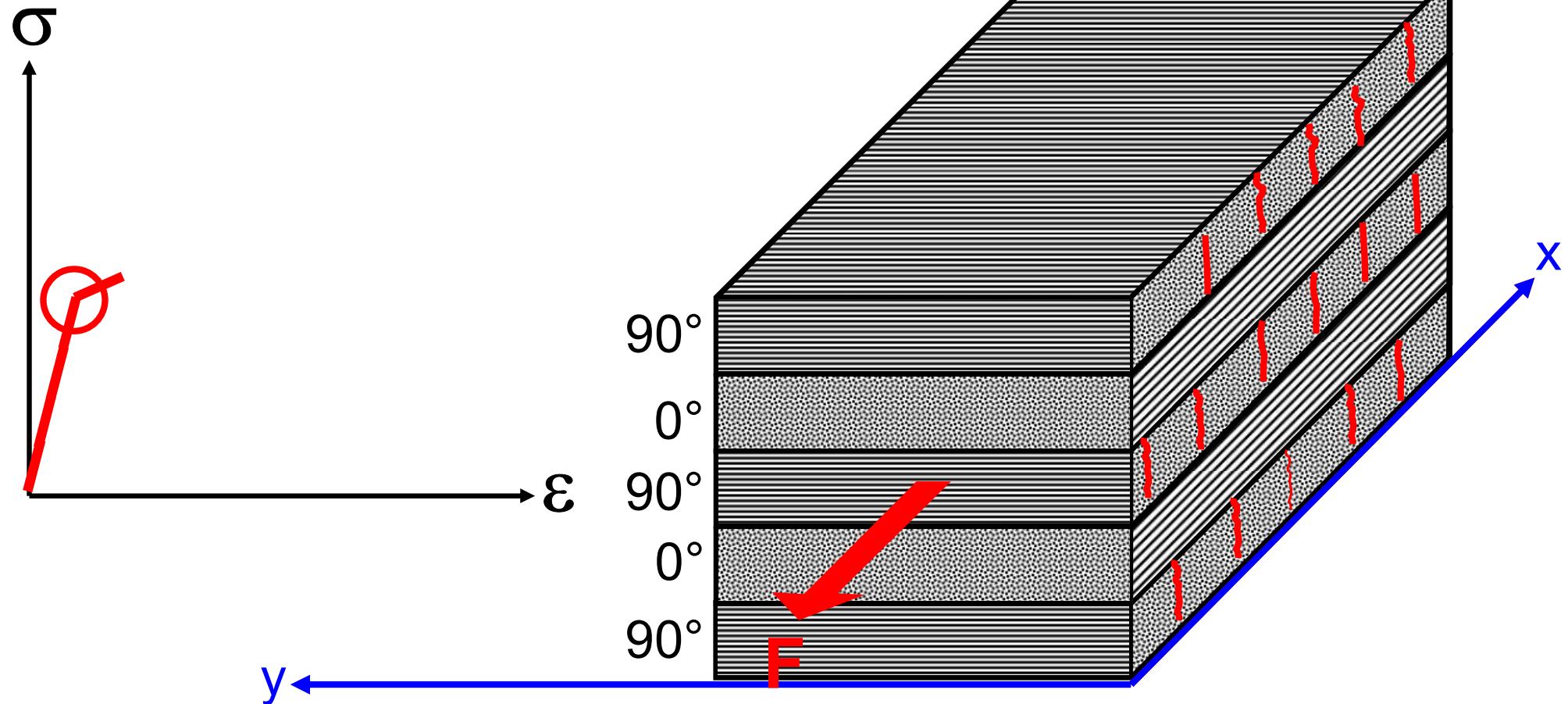


Nonlinear Failure Analysis

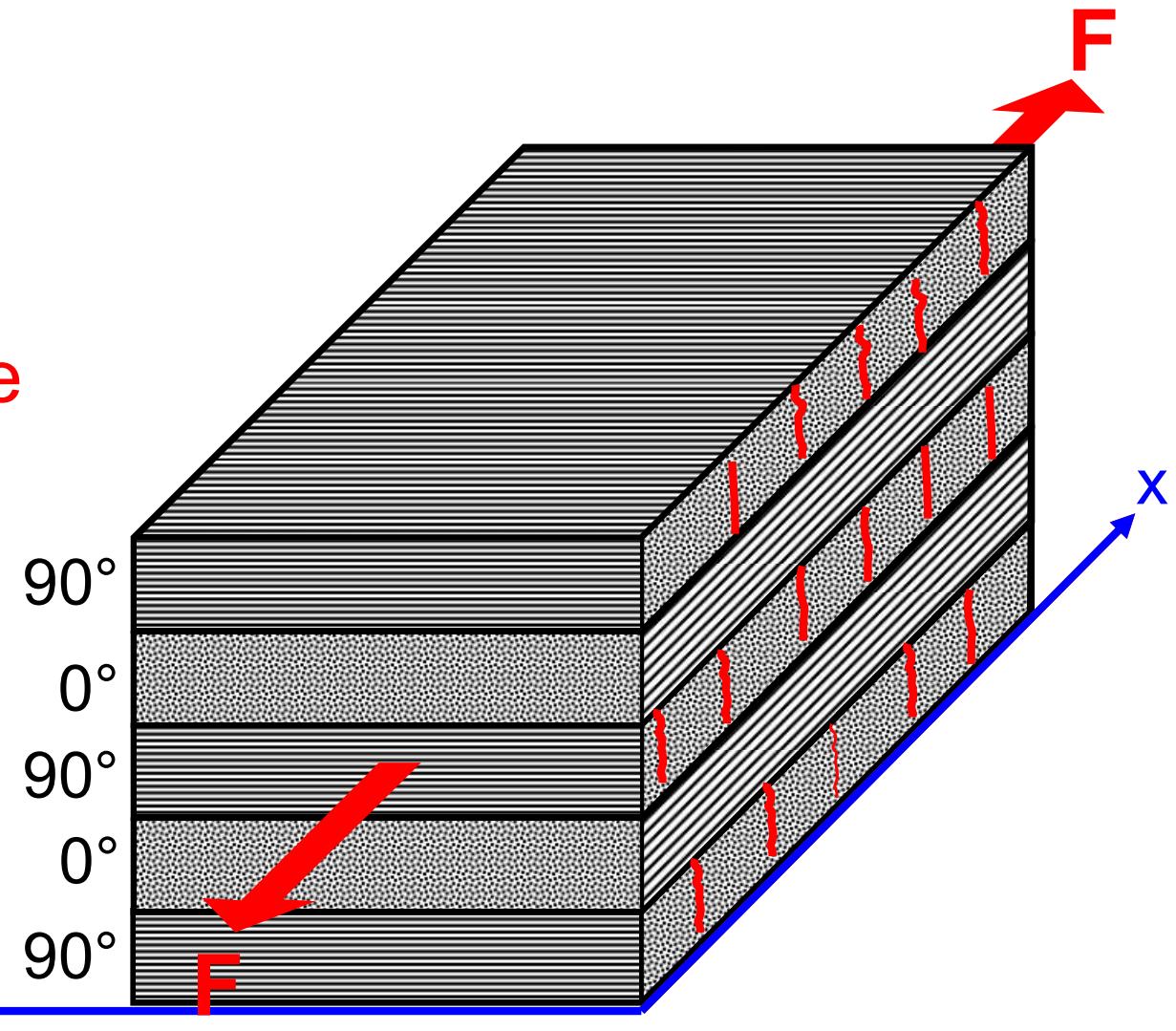
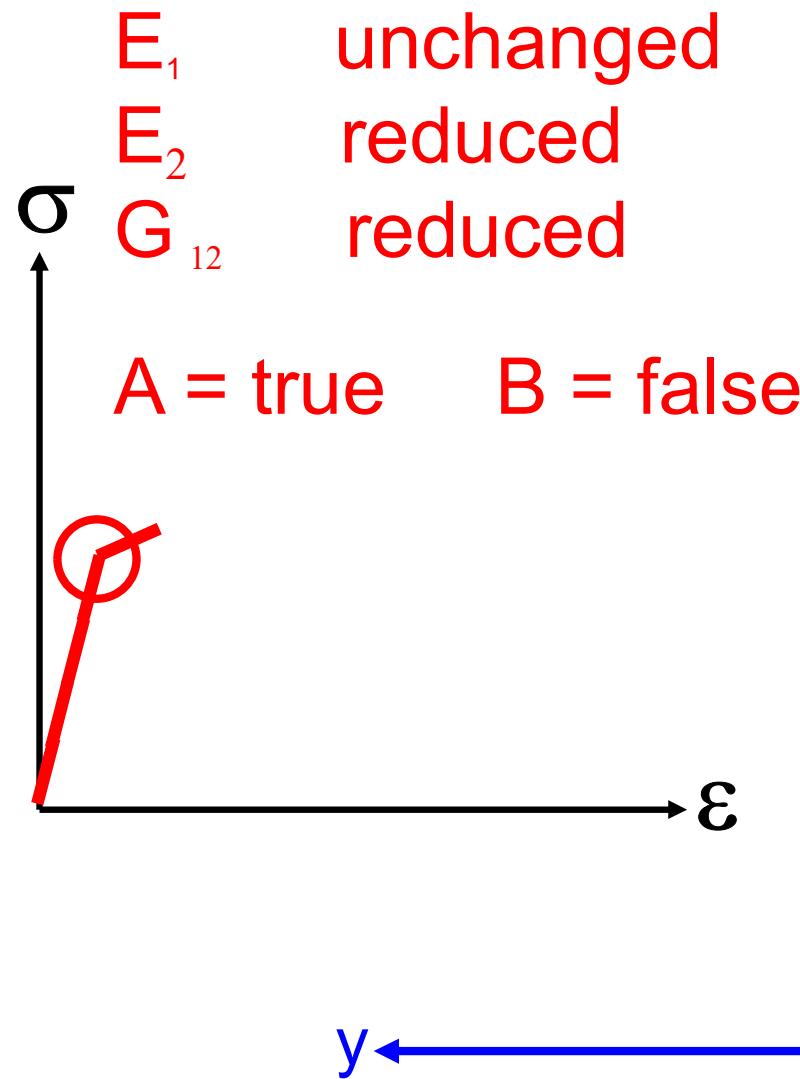


Quiz

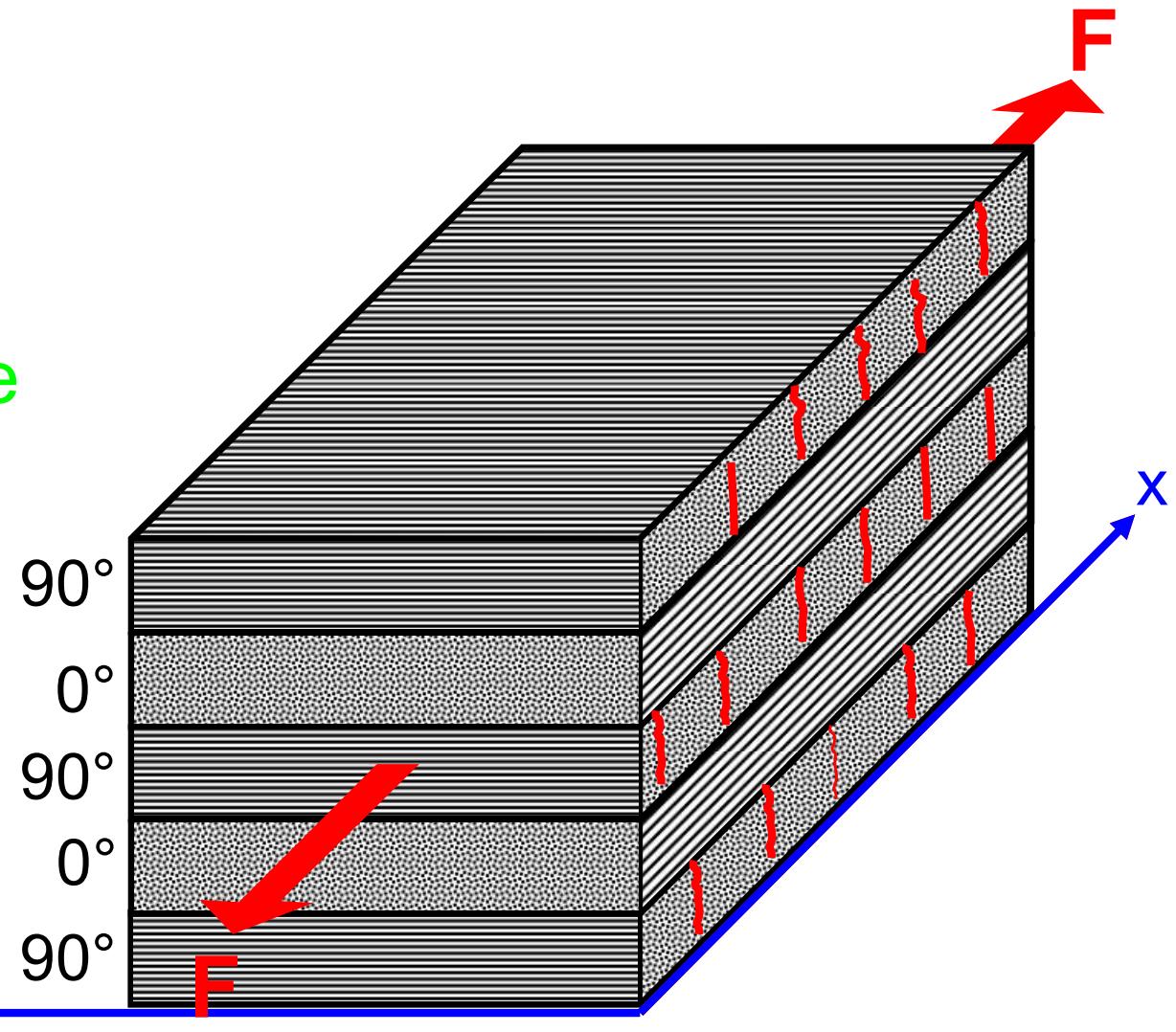
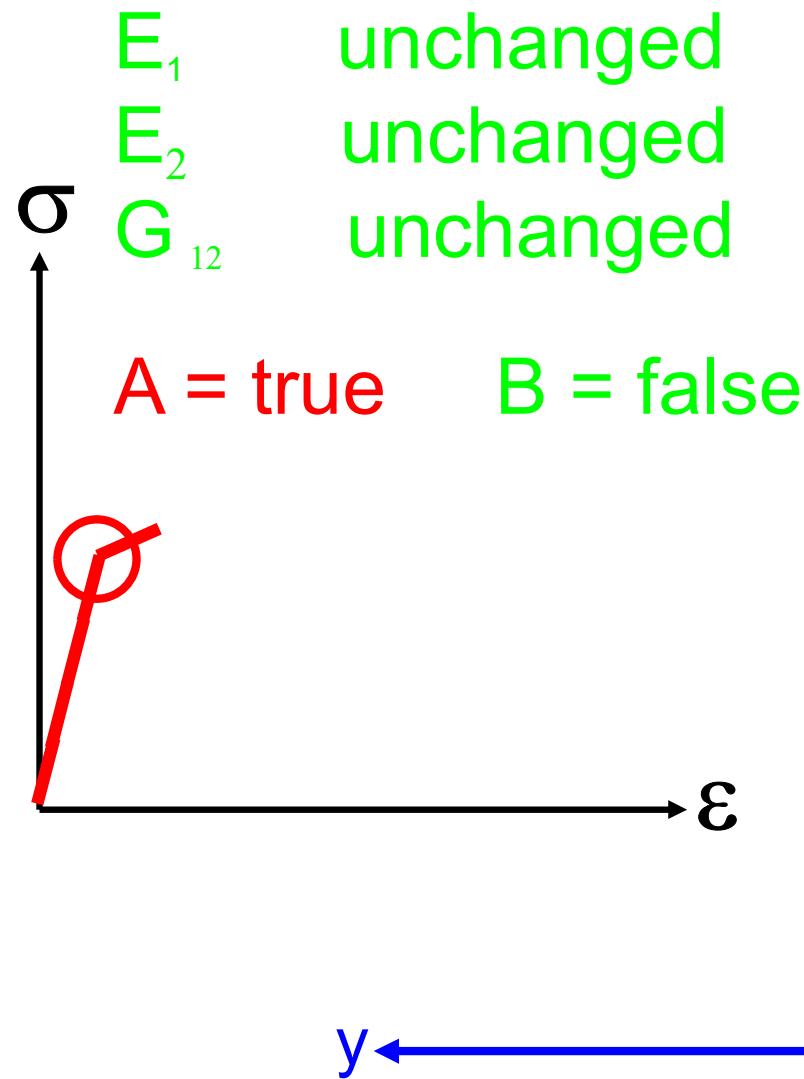
After reaching the „kinking point“ O
the elasticity constants of the
UD-Laminas have to be adjusted !



Quiz Which Measures shall be taken for 0°-Laminas?



Answer to Quiz



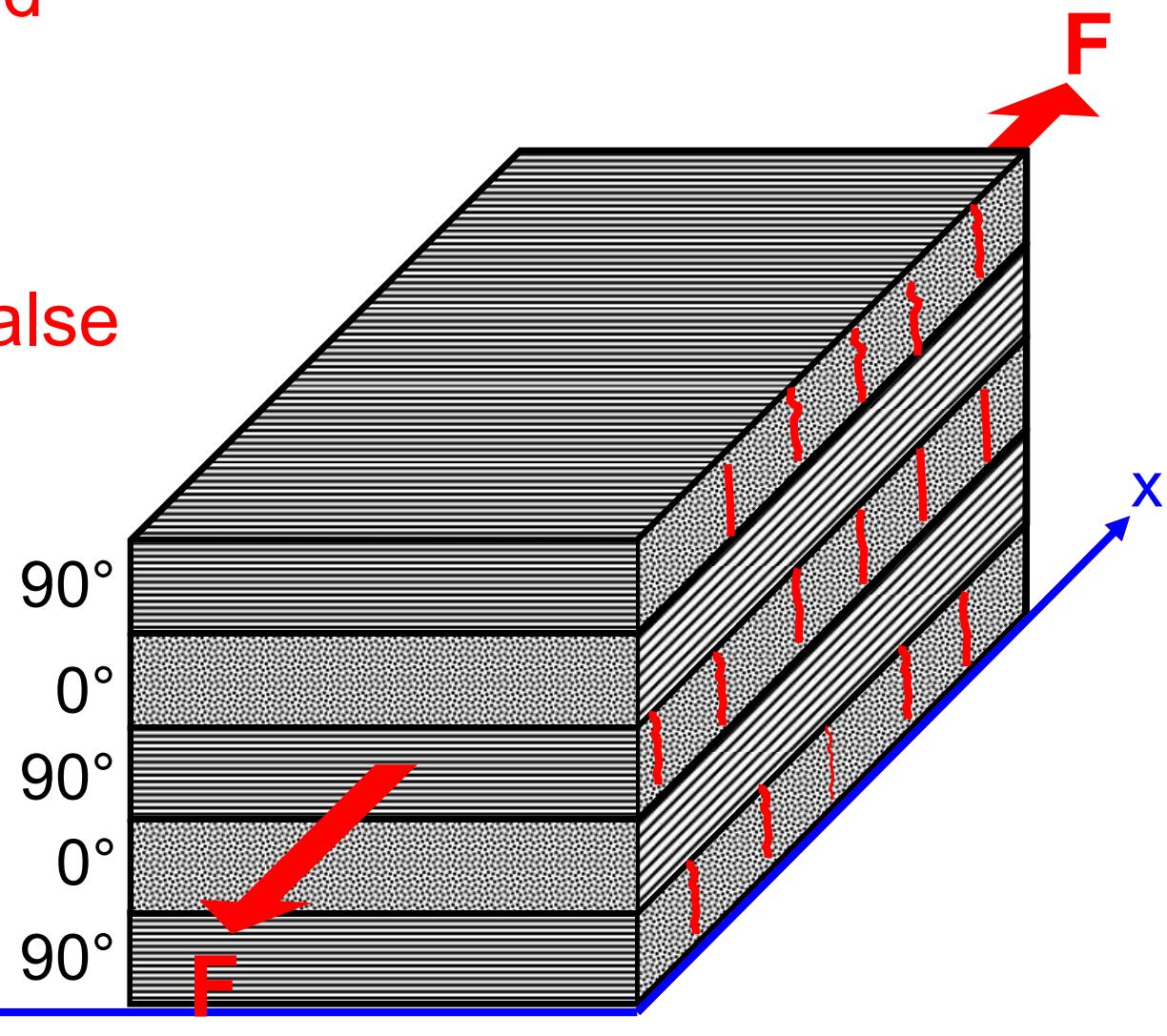
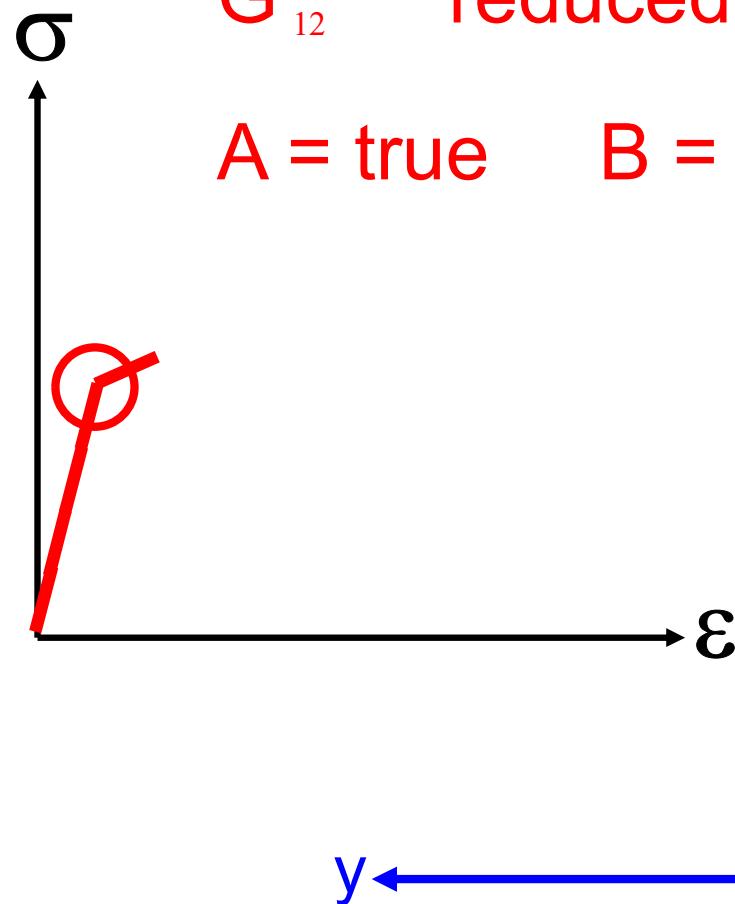
Quiz Which Measures shall be taken for 90°-Laminas?

E_1 unchanged

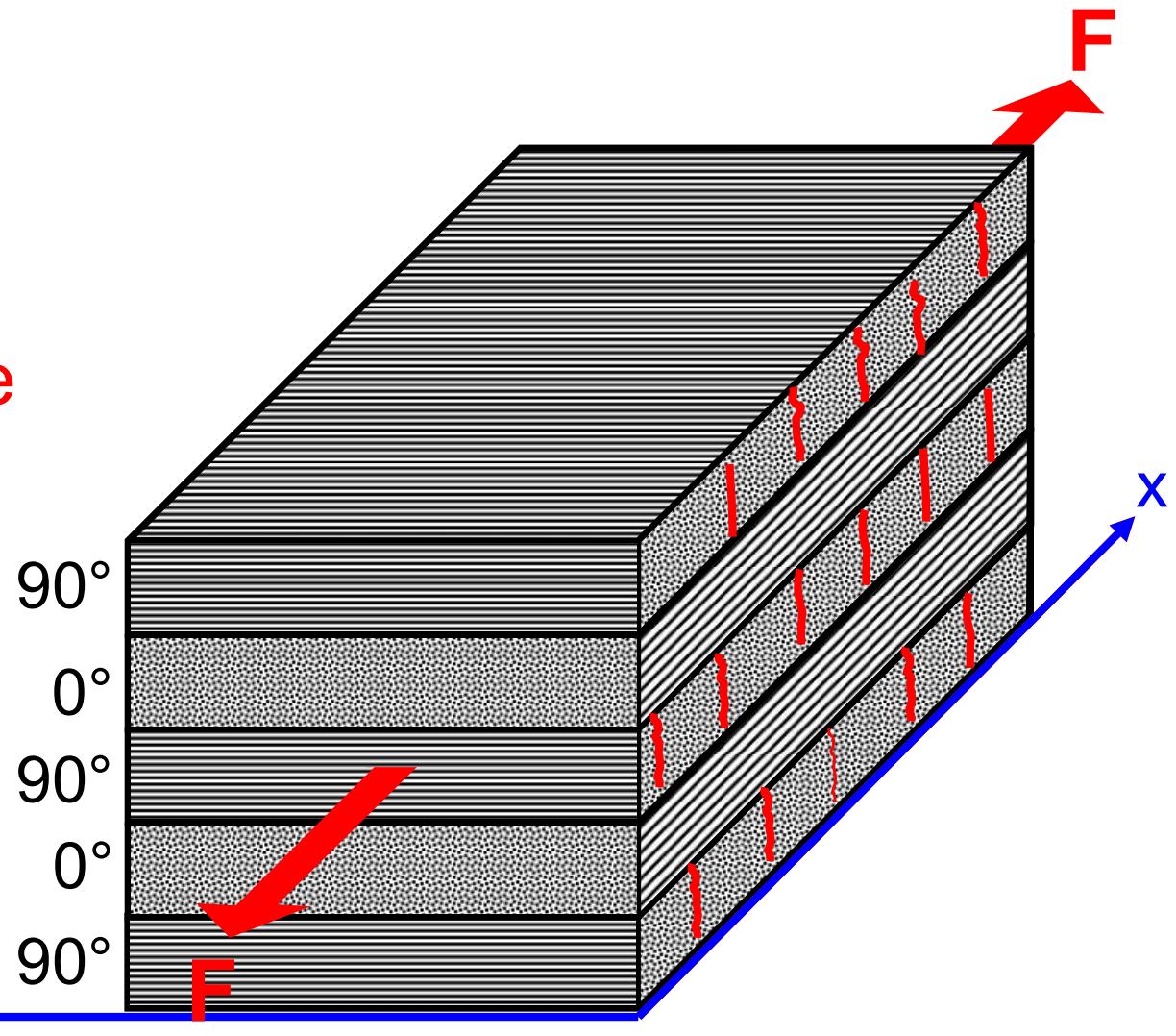
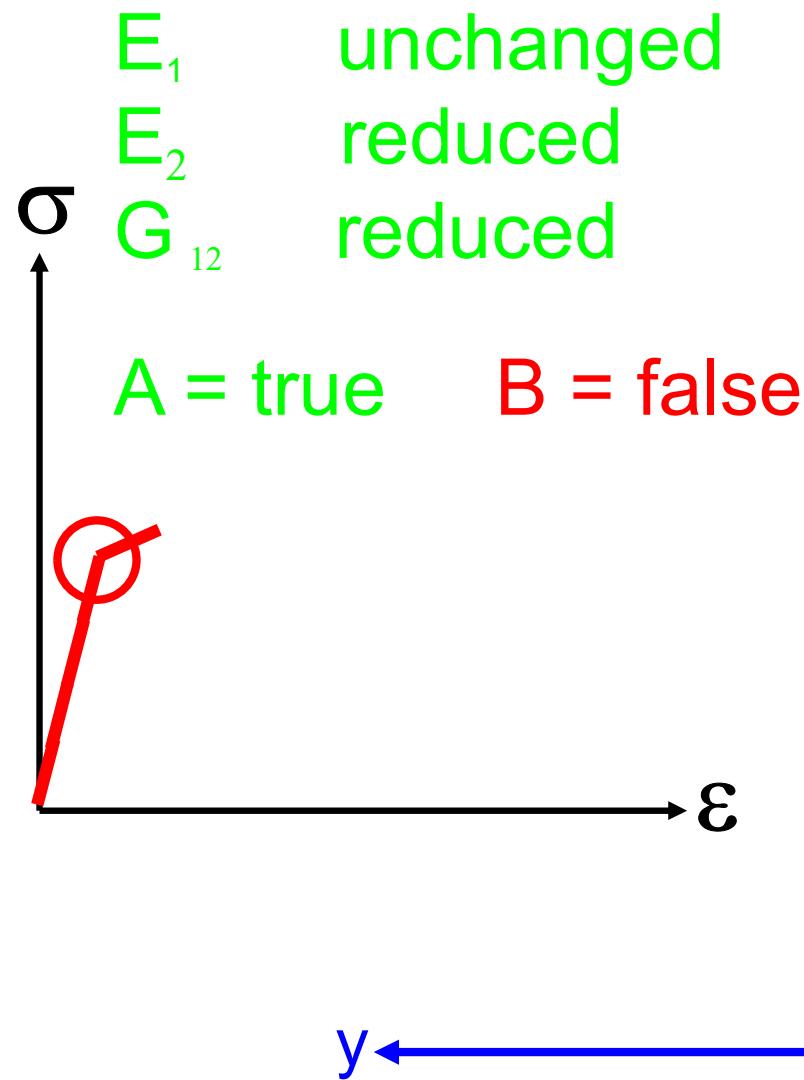
E_2 reduced

G_{12} reduced

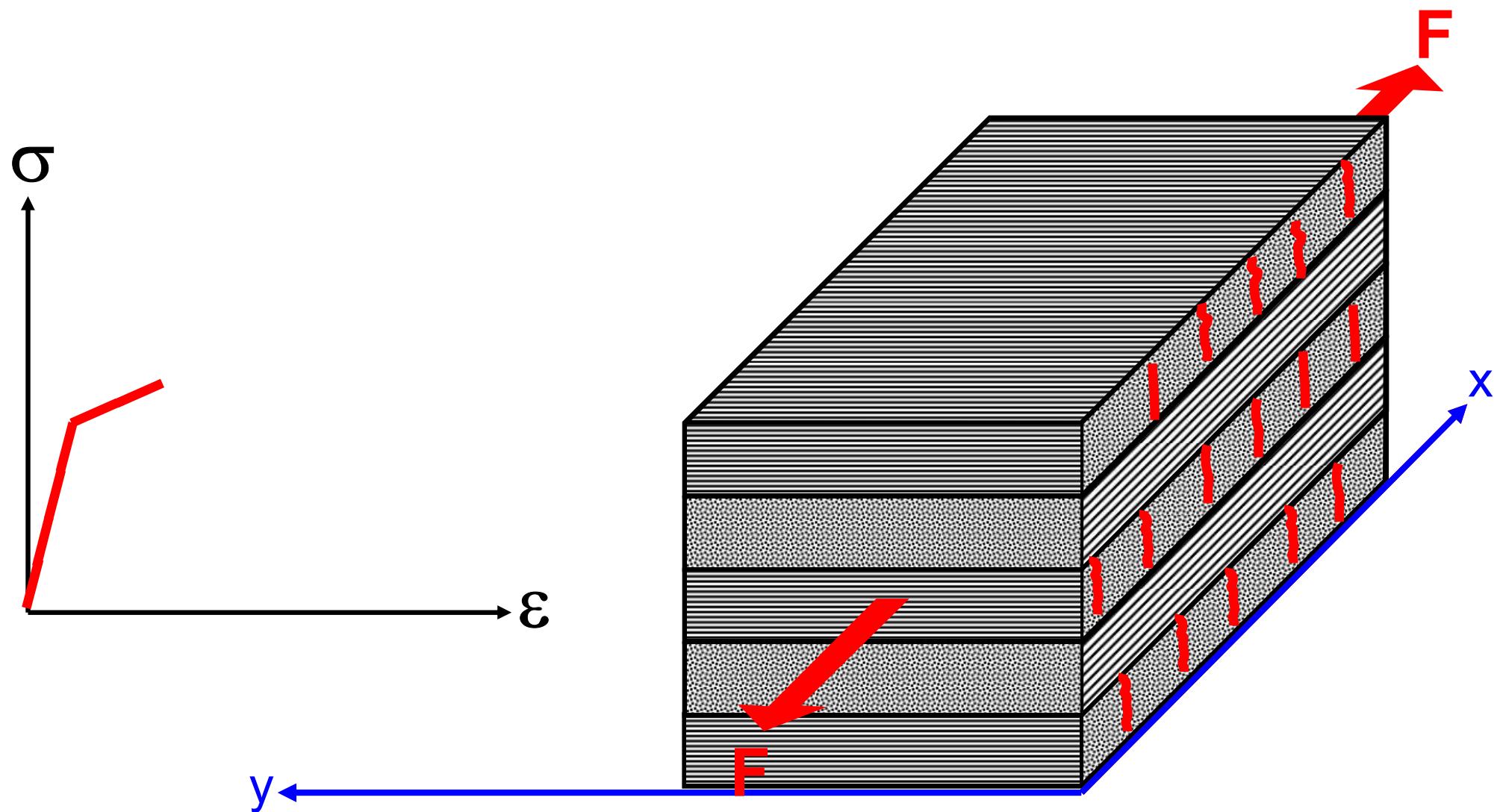
A = true B = false



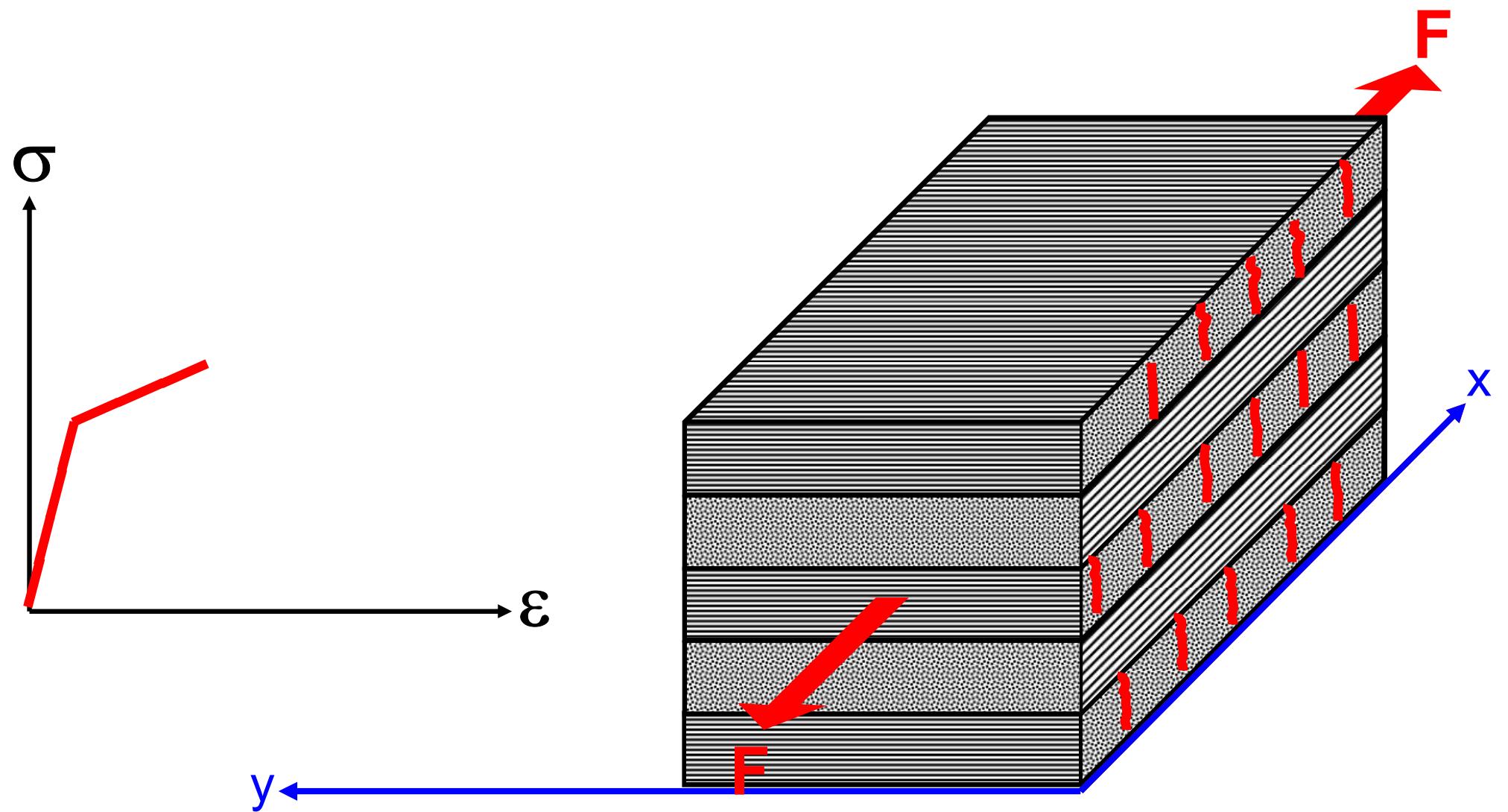
Answer to Quiz



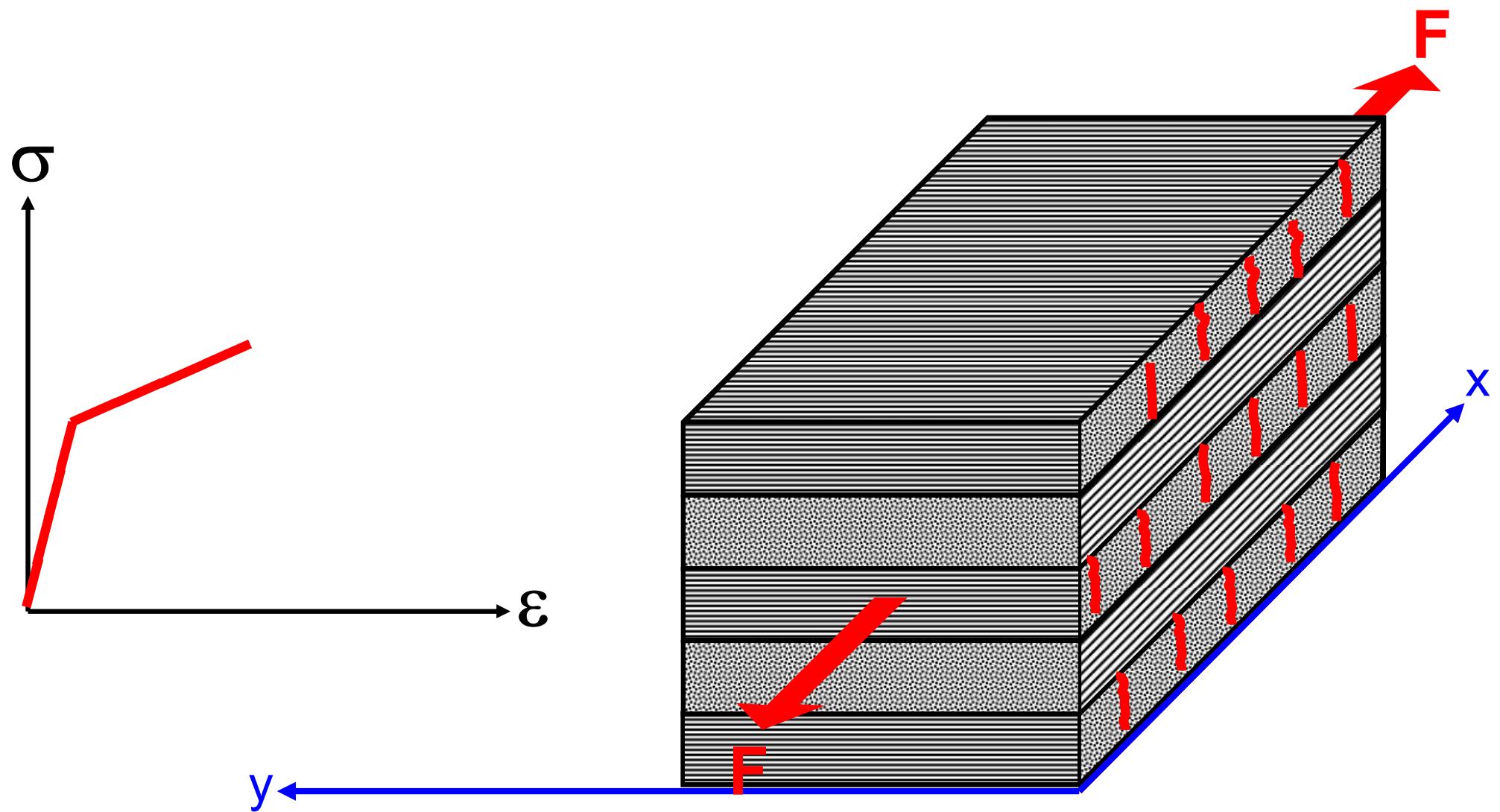
Ply by ply failure analysis



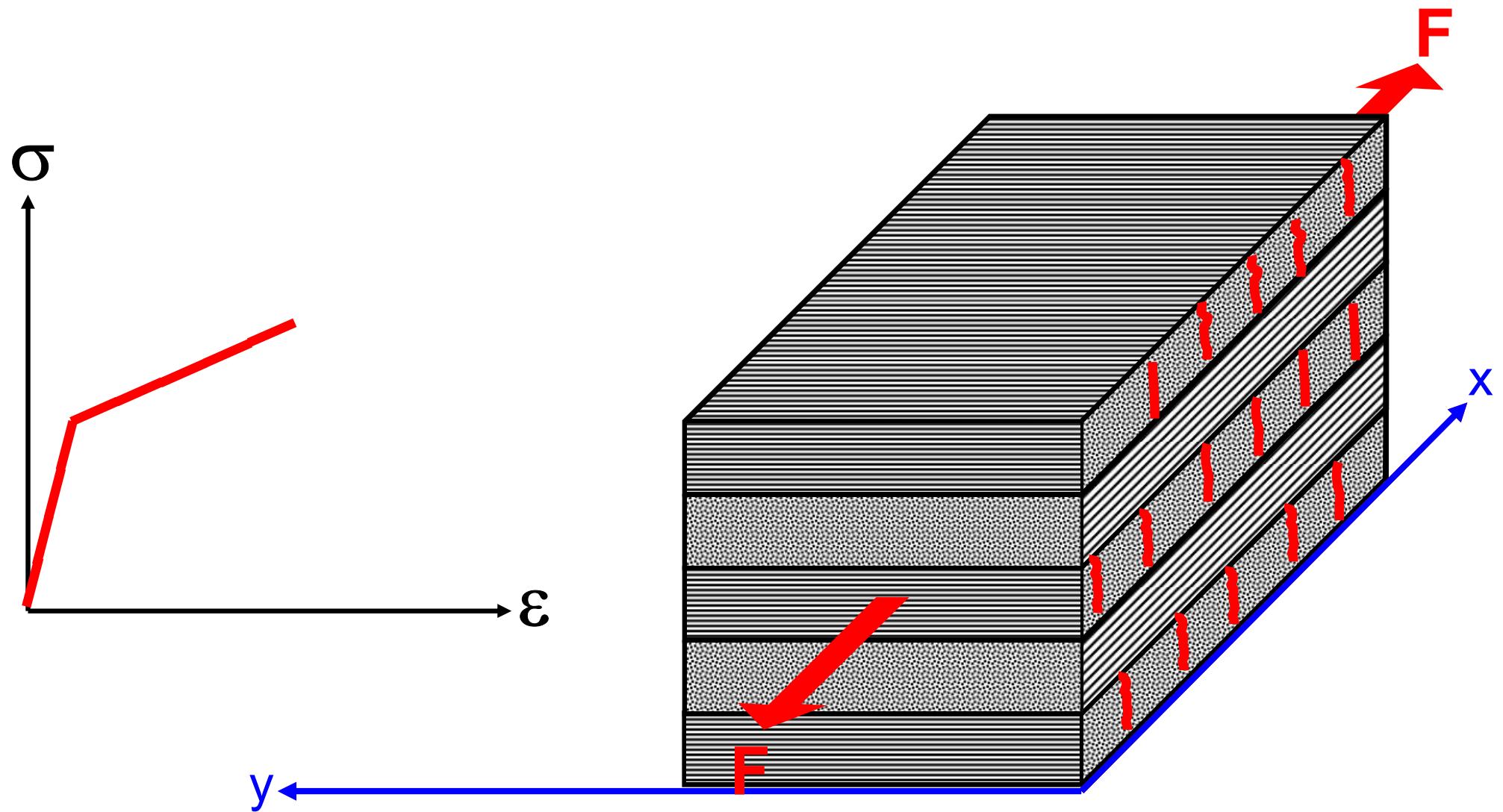
Ply by ply failure analysis



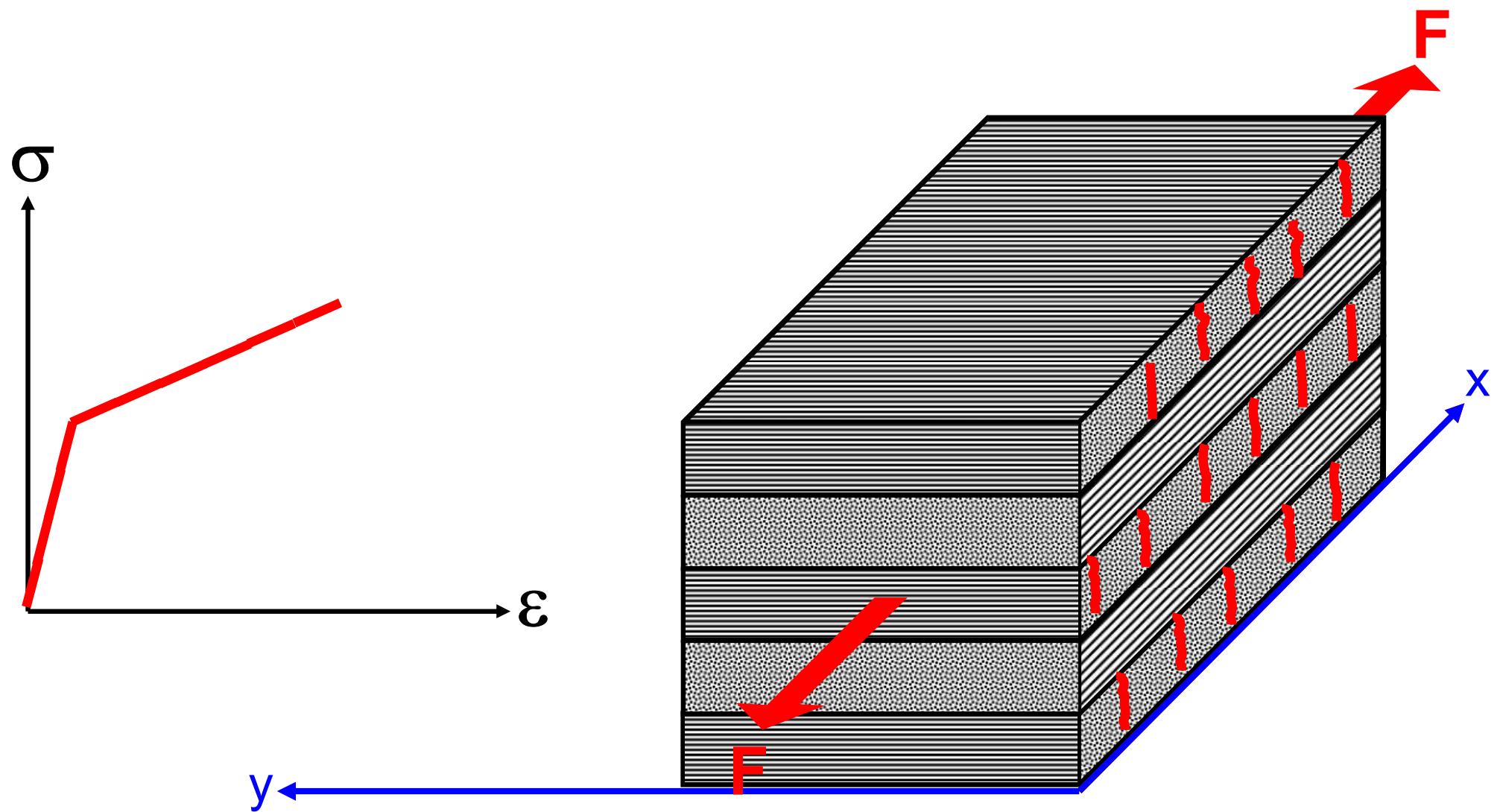
Ply by ply failure analysis



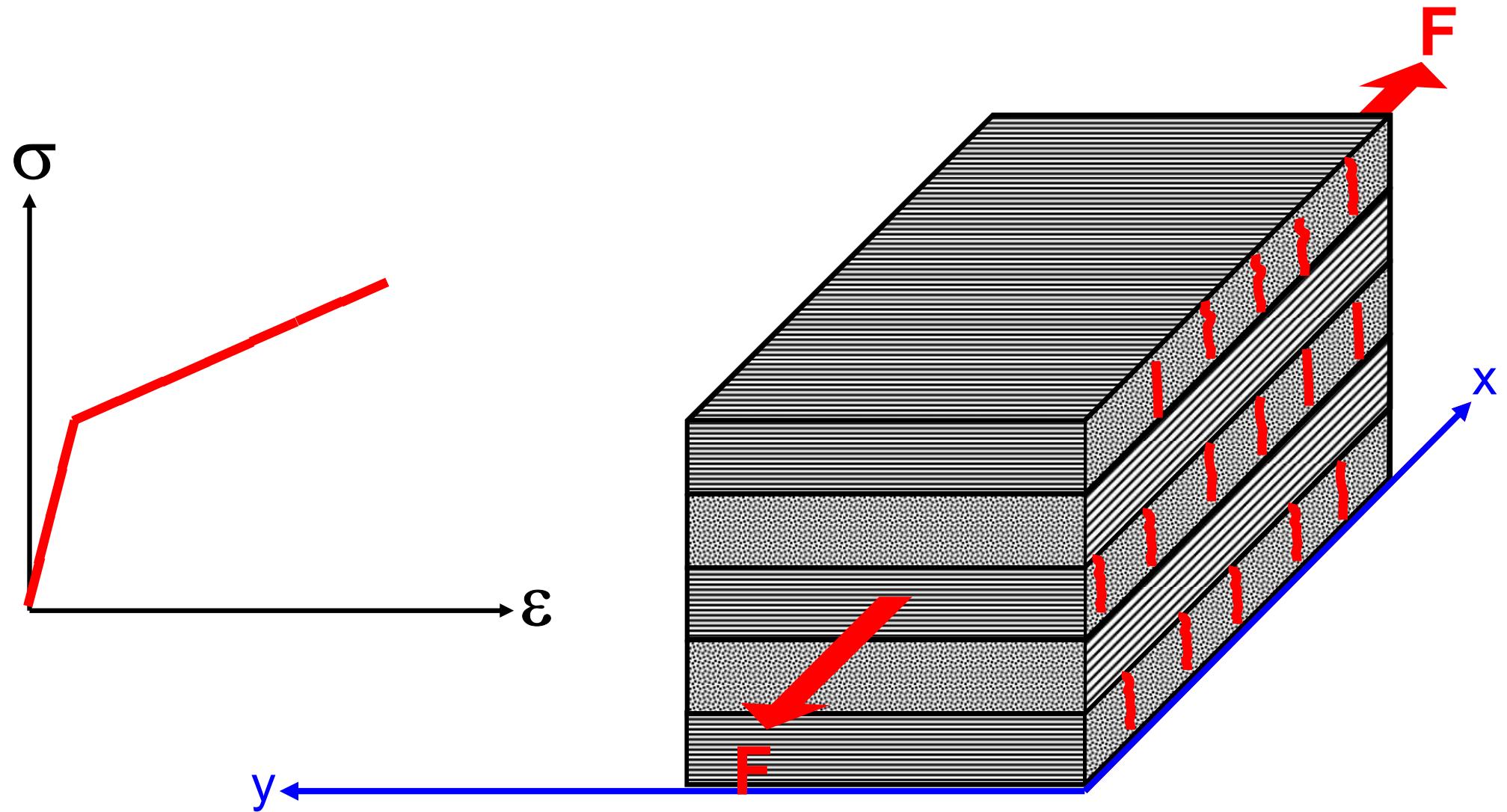
Ply by ply failure analysis



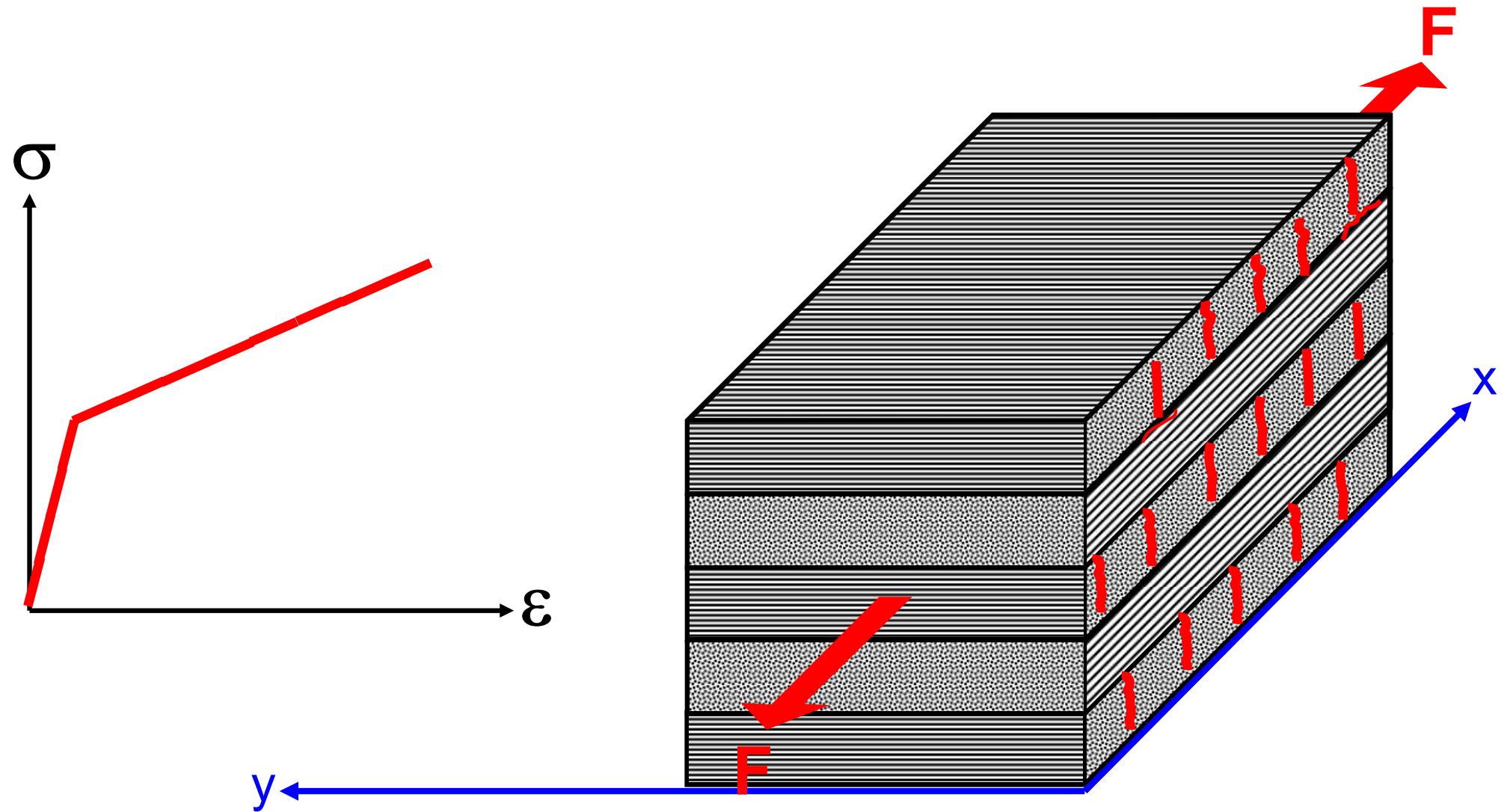
Ply by ply failure analysis



Ply by ply failure analysis



Ply by ply failure analysis



Ply by ply failure analysis

