

Special Problem 6-4.4

Two **parallel conducting plates** separated by some unknown distance Δz .

The **potential difference** between the two plates is **10 V**.

Each plate has a **surface area** equal to **0.1 m²**.

This electrostatic system stores energy equal to **0.4 Joules**.

- A. Determine the **surface** charge density on **each** of the two plates.
- B. Determine the **distance** between the two plates.

