ZS: THE PREFERRED WAY, ADD IT UP

MEASURE ZS, OR ADD IT UP?

Guidance Note 3 gives two methods: **measure** Z_s with a loop impedance tester, where it's safe to do so, or **add the measured $R_1 + R_2$ to the measured Z_e**. It says the second is **preferred** for final and distribution circuits.

So for most circuits, Z_s on the schedule is a sum: your $R_1 + R_2$ for that circuit, plus Z_e.

> **Z_e in the exam, Z_{db} on a sub-board.**
>
> Exam questions add $R_1 + R_2$ to Z_e, and so does the book. But on a **sub-board** — a garage board fed from the house board, say — adding to Z_e leaves out the distribution circuit in between. There, add to that board's **Z_{db}**. At a single main board, Z_e and Z_{db} are usually almost the same anyway.

Free section from Sparky Study Notes. The full Level 3 notes, 1,463 practice questions and the video lessons: sparkystudynotes.co.uk