

Converting From Architectural Units (Fraction form) to Engineering Units (Decimal form)

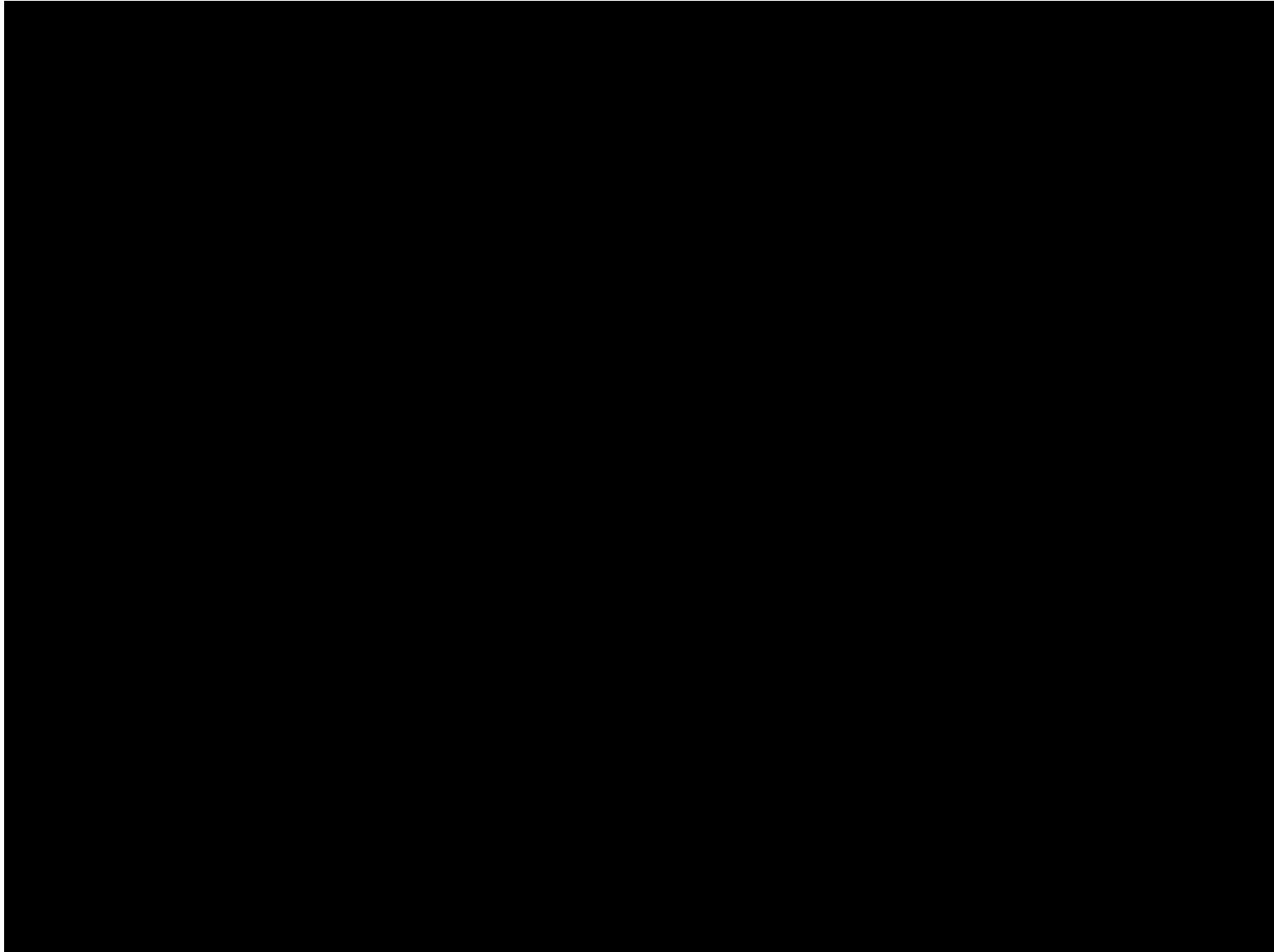
Please read thru my class notes
and be sure to take notes in your
architectural notebook

So why is it important to know how to measure properly???



Is this an Engineering or Architectural problem????

Watch this video and you decide!



Engineer & Architect Story Poles

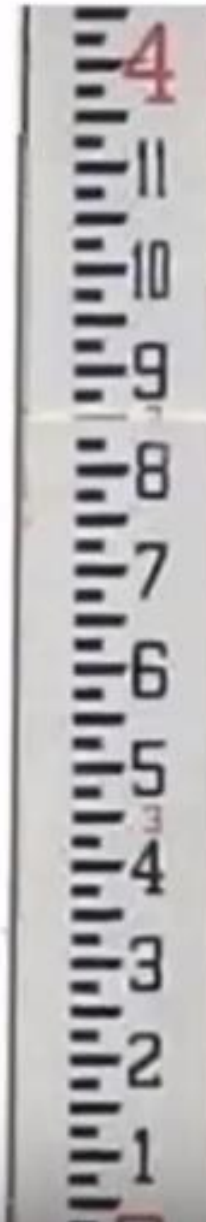
10 parts per foot

Engineer (decimal-10 parts)



12 parts (inches) per foot

Architect (fractions-12 parts)



My architectural measure with my tape measure is

Trick to remember....this means to divide!!!

3 ' 4 3/16 "

Step #1

$$3 / 16 = .1875$$

Step #2

$$\text{Add 4" to .1875} \quad 4.1875$$

Step #3

$$4.1875 / 12 = .3489$$

Answer is.... 3.3489'

HERE IS HOW YOU CAN
ALWAYS CHECK YOUR
ANSWER

Lets make our Decimal measurement an Architectural measurement

3.3489'



Step #1

Subtract the whole number and work with .3489

Trick to remember....the dot means you multiple
(2 · 3 = 6)

$$.3489 \times 12 = 4.1868$$

4 is your inches!!!



Step #2

Subtract the whole number and work with .1868

Step #3 $.1868 \times 16 = 2.9888$

This number is your fraction of an inch...so round it



Complete these conversions in your
Architectural Notebook....when you are
finished see me

Architectural Measurements to
Decimal

15' 3 11/16" 15.3072'

1' 11 1/8" 1.9270'

Engineering Measurement to Architectural

4.734' 4' – 8 13/16"

9.891' 9' – 10 11/16"