

## LOAN CONSTANTS

Loan constants are not used as frequently as they once were due to the ease of calculating payments with a calculator. They were used to quickly calculate a monthly loan payment by multiplying the loan constant by the loan amount. Since multiplying is always faster and more convenient than dividing, particularly when decimals are involved, the loan constant makes it easy to calculate the monthly payment once you know the loan constant.

The loan constant is calculated as follows:

$$\text{Loan Constant} = \frac{\text{Loan Payment (using a 20 year amortization and 8\% rate)}}{\text{Loan Amount}}$$

$$\text{Loan Constant (Annual)} = .1004 \quad \frac{\$10,037 \text{ (Annual Payment)}}{\$100,000 \text{ (Loan Amount)}}$$

Loan Constant (.1004) x Loan Amount (\$100,000) equals Loan Payment (\$10,037).

You need to make sure you know whether you are using a monthly or yearly loan constant so you when you go multiply the loan constant you know whether it results in a monthly loan payment or annual payment.

Whenever you discuss a debt service coverage ratio (DSCR) with a lender, you have to tell him what interest rate and amortization schedule you are using. Otherwise, the ratio would be meaningless to the lender.

For example, suppose the loan amount was \$400,000 and the NOI was \$55,000. Here are just a few of the different possibilities:

- 1.31 DSCR based on a 9.5%, 25 year constant
- 1.48 DSCR based on a 6.98%, 20 year constant
- 1.25 DSCR based on an 11.0% *interest only* constant

When you prepare your Loan Summary or cover letter to your lender, always show the debt service coverage ratio in reference to some loan constant.