

Excel + CRE Quick Reference

Keyboard shortcuts, finance formulas, and model-audit discipline for the CRE analyst.

NAVIGATION & SELECTION

| Action | Windows | Mac |
|----------------------------------|----------------------|-----------------------|
| Move to last cell of region | Ctrl + Arrow | Cmd + Arrow |
| Select to end of region | Ctrl + Shift + Arrow | Cmd + Shift + Arrow |
| Select entire column | Ctrl + Space | Ctrl + Space |
| Select entire row | Shift + Space | Shift + Space |
| Go To | F5 / Ctrl + G | F5 / Cmd + G |
| Go To Special (formulas, blanks) | F5 → Special | F5 → Special |
| Trace precedents / dependents | Ctrl + [/ Ctrl +] | Cmd + [/ Cmd +] |
| Switch worksheets | Ctrl + PgUp/PgDn | Cmd + Option + Arrow |
| Insert row / column | Ctrl + Shift + + | Cmd + Shift + + |
| Delete row / column | Ctrl + - | Cmd + - |
| Freeze panes | Alt + W + F | (View → Freeze Panes) |
| Filter on/off | Ctrl + Shift + L | Cmd + Shift + F |

FORMULA SHORTCUTS

| Action | Windows | Mac |
|----------------------------------|---------------------|-------------------|
| AutoSum | Alt + = | Cmd + Shift + T |
| Fill right / down | Ctrl + R / Ctrl + D | Cmd + R / Cmd + D |
| Show formulas | Ctrl + ` | Ctrl + ` |
| Evaluate selection (formula bar) | F9 | Fn + F9 |
| Insert function | Shift + F3 | Shift + F3 |
| Toggle absolute reference | F4 | Fn + F4 |
| Edit cell in place | F2 | Ctrl + U |
| Iterate full calculation | F9 | Cmd + = |
| Recalc current sheet only | Shift + F9 | Shift + Cmd + = |

FORMATTING SHORTCUTS

| Action | Shortcut |
|----------------------------|------------------|
| Open Format Cells dialog | Ctrl + 1 |
| Number format (with comma) | Ctrl + Shift + 1 |
| Currency format | Ctrl + Shift + 4 |
| Percent format | Ctrl + Shift + 5 |
| Date format | Ctrl + Shift + 3 |
| Time format | Ctrl + Shift + 2 |
| General format | Ctrl + Shift + ~ |

| | |
|---------------------------------|-----------------------------|
| Bold / italic / underline | Ctrl + B / I / U |
| Outline border | Ctrl + Shift + & |
| Remove all borders | Ctrl + Shift + _ |
| Group / ungroup rows or columns | Alt + Shift + Right/Left |
| Hide / unhide rows | Ctrl + 9 / Ctrl + Shift + 9 |
| Hide / unhide columns | Ctrl + 0 / Ctrl + Shift + 0 |

CRE FINANCE FORMULAS

| Metric | Definition | Excel |
|----------------------------------|--|--------------------------------|
| NOI | EGI – OpEx | =EGI - OPEX |
| Cap rate | NOI / Value | =NOI/Value |
| Value (income approach) | NOI / Cap Rate | =NOI/CapRate |
| DSCR | NOI / Annual Debt Service | =NOI/ADS |
| Annual Debt Service (amortizing) | $-PMT(\text{rate}/12, \text{nper}, \text{loan}) \times 12$ | =-PMT(r/12, nper*12, -loan)*12 |
| Loan Constant (annual) | Annual DS / Loan Amount | =ADS/Loan |
| Debt Yield | NOI / Loan | =NOI/Loan |
| LTV | Loan / Value | =Loan/Value |
| LTC | Loan / Total Project Cost | =Loan/TPC |
| Break-even occupancy | $(\text{OpEx} + \text{DS}) / \text{GPR}$ | =(OPEX+DS)/GPR |
| Yield-on-Cost | Stabilized NOI / TPC | =NOI_stab/TPC |
| Cash-on-cash | Annual cash flow / equity | =CF/Equity |
| IRR (regular periods) | Internal Rate of Return | =IRR(cashflows) |
| IRR (irregular dates) | Internal Rate of Return | =XIRR(cashflows, dates) |
| Equity Multiple | Total distributions / equity | =SUM(distributions)/Equity |
| RevPAR (hotel) | Occupancy \times ADR | =Occ*ADR |
| Rent / SF | Annual rent / SF | =Rent/SF |
| Expense Ratio | OpEx / EGI | =OPEX/EGI |
| Exit Value | Exit NOI / Exit Cap | =NOI_exit/Cap_exit |

COMMON CRE MODELING MISTAKES

- Hardcoded numbers buried inside formulas (move to input cells).
- Using SUM(A:A) — entire-column sums slow models.
- Missing absolute-reference anchors (\$A\$1 vs A1).
- PMT returns negative; remember to negate.
- Annual vs monthly rate confusion in PMT (rate/12, nper \times 12).
- DSCR computed on IO when loan is amortizing.
- LTV using as-is value vs as-stabilized.
- Compound vs straight-line rent growth confusion.
- Forgetting selling costs in exit proceeds.
- Year 0 vs Year 1 indexing in DCF.
- Negative NOI not breaking outputs — divide-by-zero errors.
- Cap rate inversion (NOI/Cap not Cap/NOI).

MODEL AUDIT CHECKLIST

- Inputs separated from formulas — all inputs on dedicated tab(s).
- No hardcoded values inside formulas (only in input cells).
- Sources equal uses (delta < \$1 tolerance).
- Every period balance sheet balances.
- Negative cash flow flagged with conditional formatting.
- Debt service > 0 (formula validation).
- Circular references cleared (or intentional + iterative calc enabled).
- Date consistency — no Year 0 = Year 1 errors.
- All hidden rows/columns identified.
- Broken external links resolved (Edit Links menu).
- Print areas defined on summary tabs.
- Freeze panes on long working tabs.
- Named ranges used for cross-sheet references.
- Version stamp updated on Cover tab.