

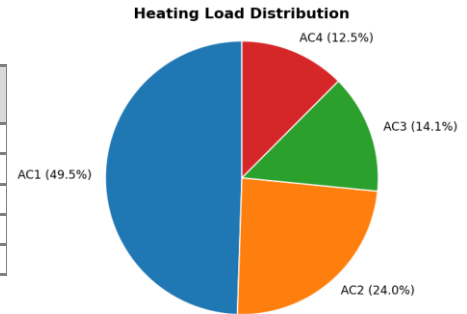
Residential System Sizing Calculation

Summary

| | | | |
|------------------------------------|-----------------------|--------------------------------|-------------|
| Location for weather / design data | Land O Lakes, Florida | Calculation date | 02/16/2026 |
| Project area | 1,435 sqft | Number of systems | 4 |
| Total heating load calculation | 19,200 Btuh | Total cooling load calculation | 53,500 Btuh |
| Total sensible cooling load | 52,400 Btuh | Total latent cooling load | 1,100 Btuh |
| Design airflow | 3,089 CFM | Weighted SHR / RH | 0.979 / 55% |

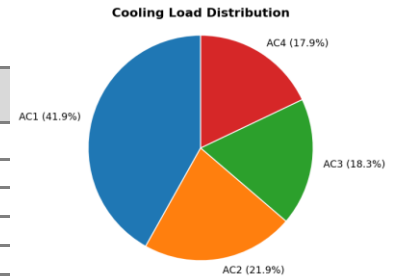
WINTER CALCULATIONS

| System | Area sqft | Heating Load MBH | Airflow CFM |
|--------------|-------------|------------------|-------------|
| AC1 | 716 | 9.5 | 1363 |
| AC2 | 350 | 4.6 | 663 |
| AC3 | 209 | 2.7 | 549 |
| AC4 | 160 | 2.4 | 514 |
| TOTAL | 1435 | 19.2 | 3089 |



SUMMER CALCULATIONS

| System | Area sqft | Total MBH | Sensible MBH | CFM | RH % |
|--------------|-------------|-------------|--------------|-------------|-----------|
| AC1 | 716 | 22.4 | 21.9 | 1363 | 57 |
| AC2 | 350 | 11.7 | 11.5 | 663 | 54 |
| AC3 | 209 | 9.8 | 9.6 | 549 | 54 |
| AC4 | 160 | 9.6 | 9.4 | 514 | 53 |
| TOTAL | 1435 | 53.5 | 52.4 | 3089 | 55 |



| | |
|--|---------------------|
| PREPARED BY: | DATE: |
| Ekaterina Smirnova / Armada Air Conditioning #CAC1823545 | 02/16/2026 07:40 AM |

System Sizing Calculations – AC1

Vladimir Nikolaev Residence | 19234 Causeway Blvd | Land O Lakes, Florida

Prepared by: Ekaterina Smirnova / Armada Air Conditioning #CAC1823545 Date: 02/16/2026

| | | | |
|-------------------------|---------------------|--------------------------|----------|
| Air System Name | AC1 | Floor Area | 716 sqft |
| Equipment Class | SPLT AHU | Air System Type | SZCAV |
| Cooling Capacity | 22.4 MBH (1.9 tons) | Sensible Capacity | 21.9 MBH |
| Heating Capacity | 9.5 MBH | Design Airflow | 1363 CFM |

CENTRAL COOLING COIL SIZING DATA

| | | | |
|----------------------------|----------------|---------------------------|----------------|
| Total coil load | 22.4 MBH | Sensible coil load | 21.9 MBH |
| Peak block airflow | 1363 CFM | Load occurs at | Sep 1100 |
| OA DB / WB | 84.0 / 74.4 °F | Entering DB / WB | 75.9 / 65.2 °F |
| Leaving DB / WB | 61.0 / 60.0 °F | Resulting RH | 57% |
| Sensible heat ratio | 0.978 | CFM per ton | 717.4 |

CENTRAL HEATING COIL SIZING DATA

| | | | |
|------------------------------|----------------|-----------------------|-----------------------|
| Max coil load | 9.5 MBH | Design airflow | 1363 CFM |
| Entering / Leaving DB | 69.7 / 76.2 °F | Location | Land O Lakes, Florida |

SYSTEM REVIEW NOTES

- This system serves approximately 716 sqft of conditioned area.
- Calculated cooling load is 22.4 MBH with 21.9 MBH sensible load and SHR 0.978.
- Calculated heating load is 9.5 MBH.
- Design supply airflow is 1363 CFM; calculated leaving air condition is 61.0 / 60.0 °F DB/WB.

System Sizing Calculations – AC2

Vladimir Nikolaev Residence | 19234 Causeway Blvd | Land O Lakes, Florida

Prepared by: Ekaterina Smirnova / Armada Air Conditioning #CAC1823545 Date: 02/16/2026

| | | | |
|-------------------------|---------------------|--------------------------|----------|
| Air System Name | AC2 | Floor Area | 350 sqft |
| Equipment Class | SPLT AHU | Air System Type | SZCAV |
| Cooling Capacity | 11.7 MBH (1.0 tons) | Sensible Capacity | 11.5 MBH |
| Heating Capacity | 4.6 MBH | Design Airflow | 663 CFM |

CENTRAL COOLING COIL SIZING DATA

| | | | |
|----------------------------|----------------|---------------------------|----------------|
| Total coil load | 11.7 MBH | Sensible coil load | 11.5 MBH |
| Peak block airflow | 663 CFM | Load occurs at | Sep 1200 |
| OA DB / WB | 86.5 / 75.1 °F | Entering DB / WB | 76.5 / 65.1 °F |
| Leaving DB / WB | 60.4 / 59.3 °F | Resulting RH | 54% |
| Sensible heat ratio | 0.979 | CFM per ton | 663.0 |

CENTRAL HEATING COIL SIZING DATA

| | | | |
|------------------------------|----------------|-----------------------|-----------------------|
| Max coil load | 4.6 MBH | Design airflow | 663 CFM |
| Entering / Leaving DB | 69.3 / 75.8 °F | Location | Land O Lakes, Florida |

SYSTEM REVIEW NOTES

- This system serves approximately 350 sqft of conditioned area.
- Calculated cooling load is 11.7 MBH with 11.5 MBH sensible load and SHR 0.979.
- Calculated heating load is 4.6 MBH.
- Design supply airflow is 663 CFM; calculated leaving air condition is 60.4 / 59.3 °F DB/WB.

System Sizing Calculations – AC3

Vladimir Nikolaev Residence | 19234 Causeway Blvd | Land O Lakes, Florida

Prepared by: Ekaterina Smirnova / Armada Air Conditioning #CAC1823545 Date: 02/16/2026

| | | | |
|-------------------------|--------------------|--------------------------|----------|
| Air System Name | AC3 | Floor Area | 209 sqft |
| Equipment Class | SPLT AHU | Air System Type | SZCAV |
| Cooling Capacity | 9.8 MBH (0.8 tons) | Sensible Capacity | 9.6 MBH |
| Heating Capacity | 2.7 MBH | Design Airflow | 549 CFM |

CENTRAL COOLING COIL SIZING DATA

| | | | |
|----------------------------|----------------|---------------------------|----------------|
| Total coil load | 9.8 MBH | Sensible coil load | 9.6 MBH |
| Peak block airflow | 549 CFM | Load occurs at | Oct 1500 |
| OA DB / WB | 87.4 / 74.4 °F | Entering DB / WB | 76.6 / 65.1 °F |
| Leaving DB / WB | 60.4 / 59.2 °F | Resulting RH | 54% |
| Sensible heat ratio | 0.975 | CFM per ton | 686.2 |

CENTRAL HEATING COIL SIZING DATA

| | | | |
|------------------------------|----------------|-----------------------|-----------------------|
| Max coil load | 2.7 MBH | Design airflow | 549 CFM |
| Entering / Leaving DB | 69.8 / 74.3 °F | Location | Land O Lakes, Florida |

SYSTEM REVIEW NOTES

- This system serves approximately 209 sqft of conditioned area.
- Calculated cooling load is 9.8 MBH with 9.6 MBH sensible load and SHR 0.975.
- Calculated heating load is 2.7 MBH.
- Design supply airflow is 549 CFM; calculated leaving air condition is 60.4 / 59.2 °F DB/WB.

System Sizing Calculations – AC4

Vladimir Nikolaev Residence | 19234 Causeway Blvd | Land O Lakes, Florida

Prepared by: Ekaterina Smirnova / Armada Air Conditioning #CAC1823545 Date: 02/16/2026

| | | | |
|-------------------------|--------------------|--------------------------|----------|
| Air System Name | AC4 | Floor Area | 160 sqft |
| Equipment Class | SPLT AHU | Air System Type | SZCAV |
| Cooling Capacity | 9.6 MBH (0.8 tons) | Sensible Capacity | 9.4 MBH |
| Heating Capacity | 2.4 MBH | Design Airflow | 514 CFM |

CENTRAL COOLING COIL SIZING DATA

| | | | |
|----------------------------|----------------|---------------------------|----------------|
| Total coil load | 9.6 MBH | Sensible coil load | 9.4 MBH |
| Peak block airflow | 514 CFM | Load occurs at | Oct 1500 |
| OA DB / WB | 87.4 / 74.4 °F | Entering DB / WB | 75.9 / 64.1 °F |
| Leaving DB / WB | 59.0 / 57.9 °F | Resulting RH | 53% |
| Sensible heat ratio | 0.975 | CFM per ton | 642.5 |

CENTRAL HEATING COIL SIZING DATA

| | | | |
|------------------------------|----------------|-----------------------|-----------------------|
| Max coil load | 2.4 MBH | Design airflow | 514 CFM |
| Entering / Leaving DB | 70.0 / 74.2 °F | Location | Land O Lakes, Florida |

SYSTEM REVIEW NOTES

- This system serves approximately 160 sqft of conditioned area.
- Calculated cooling load is 9.6 MBH with 9.4 MBH sensible load and SHR 0.975.
- Calculated heating load is 2.4 MBH.
- Design supply airflow is 514 CFM; calculated leaving air condition is 59.0 / 57.9 °F DB/WB.