

Dairy Facility Risk Factors

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An honest evaluation of dairy facilities can be helpful in exposing environmental factors that may limit or challenge health, production and performance of dairy cattle. The following “risk” factors can be used as a guideline to evaluate dairy shelters. All of the values used in this tool are measurable. The values in the “Low Risk” category are generally accepted to provide positive environmental and management results. Factors that fall in the “High Risk” category

Environment

Air Quality : Temperature difference between stall area and outside.

| Low | Medium | High |
|-----|-----------------|--------------|
| | 5 to 10 degrees | > 10 degrees |

Heat Abatement

| Low | Medium | High |
|--|--|------------------------|
| Tunnel Ventilation or Circulation Fans PLUS Evaporative Cooling Used | Tunnel Ventilation or Circulation Fans Only Used | No heat abatement used |

Management

Overcrowding

| Low | Medium | High |
|-----|-----------|-------|
| | 5% to 20% | > 20% |

Comfort

The following guidelines are used as a first step in stall evaluation. Stall success or failure can involve several factors other than dimensions. A more accurate evaluation of stall acceptance, comfort, and performance involves observation of stall use over time.

Freestalls(Large Frame)

Width

| Low | Medium | High |
|-----|-----------------|-------------|
| | 46 to 48 inches | < 46 inches |

Length (Closed Front) Measured from alley side of curb to the stall side of support post. Closed front defined as having an obstruction within the area from 6 inches above stall surface to 30 inches above stall surface.

| Low | Medium | High |
|-----|-------------|------------|
| | 7.5 to 9 ft | < 7.5 feet |

Length (Open Front): Measured from alley side of curb to the stall side of support post. Open front defined as have no obstruction within the area from 6 inches above stall surface to 30 inches above stall surface.

| Low | Medium | High |
|-----|-------------|----------|
| | 7 to 8 feet | < 7 feet |

Neck rail (horizontal): Measured from the alley side of curb to the cow side of the neck rail.

| Low | Medium | High |
|-----------|----------|-------------|
| 68 inches | 64 to 68 | < 64 inches |

Neck rail (vertical): Measured from the stall surface if mattress or from stall curb if sand bedded to the bottom of the neck rail.

| Low | Medium | High |
|-----|-----------------|-------------|
| | 44 to 48 inches | < 44 inches |

Brisket locator (board): Measured from the alley side of the curb if mattress or from cow side of curb if sand bedded to the bottom of the brisket locator.

| Low | Medium | High |
|-----|-----------------|-------------|
| | 66 to 70 inches | < 66 inches |

Freestalls (Small Frame)

Width

| Low | Medium | High |
|--------|-----------------|-------------|
| inches | 43 to 45 inches | < 43 inches |

Length (Closed Front): Measured from alley side of curb to the stall side of support post. Closed front defined as having an obstruction within the area from 6 inches above stall surface to 30 inches above stall surface.

| Low | Medium | High |
|--------|-------------|------------|
| 8 feet | 6.5 to 8 ft | < 6.5 feet |

Length (Open Front): Measured from alley side of curb to the stall side of support post. Open front defined as have no obstruction within the area from 6 inches above stall surface to 30 inches above stall surface.

| Low | Medium | High |
|------|-------------|----------|
| feet | 6 to 7 feet | < 6 feet |

Neck rail (horizontal): Measured from the alley side of curb to the cow side of the neck rail.

| Low | Medium | High |
|----------|----------|-------------|
| 4 inches | 60 to 64 | < 60 inches |

Neck rail (vertical): Measured from the stall surface if mattress or from stall curb if sand bedded to the bottom of the neck rail.

| Low | Medium | High |
|----------|----------|------|
| 4 inches | 40 to 44 | |

Tiestalls (Large Frame)

Width

| Low | Medium | High |
|-----------|-----------------|-------------|
| 54 inches | 51 to 54 inches | < 51 inches |

Length: Measured from cow side of feed curb to edge of gutter.

| Low | Medium | High |
|-----------|--------|------|
| 70 inches | | |