

## Correlation Between Estimated 12<sup>th</sup> Rib Fat and Preliminary Yield Grade

Estimated 12 <sup>th</sup> Rib Fat (in)	Preliminary Yield Grade
0.0	2.00
0.1	2.25
0.2	2.50
0.3	2.75
0.4	3.00
0.5	3.25
0.6	3.50
0.7	3.75
0.8	4.00
0.9	4.25
1.0	4.50
1.1	4.75

*Helpful Hints to Remember the Chart:*

1. Use 0.4 inch estimated 12<sup>th</sup> rib fat as the standard. This corresponds to a preliminary yield grade of 3.00.
2. For every 0.1 inch the estimated 12<sup>th</sup> rib fat is below the standard, adjust the preliminary yield grade downward by factor of 0.25.
3. For every 0.1 inch the estimated 12<sup>th</sup> rib fat is above the standard, adjust the preliminary yield grade upward by factor of 0.25.

## Adjustments to Preliminary Yield Grade for Kidney, Pelvic, and Heart Fat Based on Estimated 12<sup>th</sup> Rib Fat

Estimated 12 <sup>th</sup> Rib Fat (in)	%KPH Adjustment
0.1	- 0.4
0.2	- 0.4
0.3	- 0.3
0.4	- 0.3
0.5	- 0.2
0.6	- 0.2
0.7	- 0.1
0.8	- 0.1
0.9	0
1.0	+ 0.1
1.1	+ 0.2

*Key Points:*

1. The adjustments to preliminary yield grade for percentage kidney, pelvic, and heart fat (%KPH) is based on the assumption that market steers with average finish will have 3.5% KPH. This corresponds to 0.9 inch of estimated 12<sup>th</sup> rib fat.
2. The preliminary yield grade for market steers with estimated 12<sup>th</sup> rib fat below this standard are adjusted downward as shown in the chart.
3. The preliminary yield grade for market steers with estimated 12<sup>th</sup> rib fat above this standard are adjusted upward as shown in the chart.

## Standard (Expected) Rib Eye Area for Market Steers

Live Weight (lbs)	Hot Carcass Weight (lbs)	Standard Rib Eye Area (in <sup>2</sup> )
645	400	8.6
685	425	8.9
726	450	9.2
766	475	9.5
806	500	9.8
847	525	10.1
887	550	10.4
927	575	10.7
968	600	11.0
1,008	625	11.3
1,048	650	11.6
1,089	675	11.9
1,129	700	12.2
1,169	725	12.5
1,210	750	12.8
1,250	775	13.1
1,290	800	13.4
1,331	825	13.7
1,371	850	14.0
1,411	875	14.3
1,452	900	14.6
1,492	925	14.9
1,532	950	15.2
1,573	975	15.5
1,613	1,000	15.8
1,653	1,025	16.1
1,694	1,050	16.4
1,774	1,100	16.7
1,815	1,125	17.0
1,855	1,150	17.3
1,895	1,175	17.6
1,935	1,200	17.9
1,976	1,225	18.2
2,016	1,250	18.5
2,056	1,275	18.8
2,097	1,300	19.1

*Key Points:*

1. Hot carcass weight is calculated by multiplying live weight by a standard dressing percentage of 62%.
2. The standard (or expected) rib eye area increases by 0.3 in<sup>2</sup> for every 25 lb increase in hot carcass weight. Or, stated another way, the standard (or expected) rib eye area increases by 0.1 in<sup>2</sup> for every 8 lb increase in hot carcass weight.
3. For each 1.0 in<sup>2</sup> the estimated rib eye area for a market steer is below the standard rib eye area, 0.3 is added to the preliminary yield grade.
4. For each 1.0 in<sup>2</sup> the estimated rib eye area for a market steer is above the standard rib eye area, 0.3 is subtracted from the preliminary yield grade.
5. If the estimated rib eye area is the same as the standard rib eye area, no adjustment is made to the preliminary yield grade.

## Breed Effect on Estimated Quality Grade of Market Steers

### Major Breed Categories for Market Steers

Breed Category	Specific Breeds
English	Angus, Hereford, Shorthorn
Exotic	Chianina, Limousin, Maine Anjou, Simmental
Brahman	Beefmaster, Brangus, Santa Gertrudis
Dairy	Brown Swiss, Guernsey, Holstein, Jersey

### Potential Quality Grades for Breed Categories of Market Steers Based on 12<sup>th</sup> Rib Fat

Breed Category	12 <sup>th</sup> Rib Fat						
	0.2 inch	0.3 inch	0.4 inch	0.5 inch	0.6 inch	0.7 inch	0.8 inch
English	Select –	Select	Select +	Choice –	Choice	Choice +	Prime –
Exotic	Standard	Select –	Select –	Select	Choice –	Choice –	Choice
Brahman	Standard	Standard	Select –	Select	Choice –	Choice –	Choice
Dairy	Select	Select +	Choice –	Choice	Choice +	Prime	Prime
English x Exotic	Standard	Select –	Select	Choice –	Choice	Choice	Choice +
English x Brahman	Standard	Standard	Select –	Select	Choice –	Choice	Choice
Exotic x Brahman	Standard	Standard	Select –	Select –	Select	Choice –	Choice –

This table represents estimates of a breed category's potential Quality Grade based on its genetic ability to marble relative to 12<sup>th</sup> rib fat.