

# Hospitality Industry Textile Replacement Factors

A Comprehensive Listing of Linen Replacement Factors for all  
Hospitality Textile Items

*The following list was compiled from Phillips & Associates data files on linen items. The database is extensive. The Gross Replacement Factor is a composite average of data over the past three years. It represents the number of new pieces placed into service per 100 items issued.*



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by

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## Understanding Laundry Plant Linen Replacement Factors

There are always "rules-of-thumb" and other tricks of the trade that can be incorporated in the management tool bag. However, to separate perception from fact requires a certain amount of practical knowledge and application. Shown below are several useful formulas that the "for-profit" segments of the textile maintenance industry use to precisely determine the life of a piece of merchandise and the cost to use that item.

These formulae have been adapted for use in the hospitality industry to calculate the approximate number of items and uses per item that is required for budgeting purposes.

**1. TEXTILE REPLACEMENT RATIO** – Determined by the number of new pieces placed into service, within a given period of time, divided by the total number of pieces used during the same period. i.e.: Through record keeping, the number of pillowslips used by a facility Y.T.D. was 150,000. The number of new pillowslips placed into service for the same period of time was 3,750. The TEXTILE REPLACEMENT RATIO is determined as follows:

$$\frac{3,750 \text{ new pillowslips}}{150,000 \text{ pillowslips used}} = 2.5\%$$

**2. USES PER ITEM** – Determined by dividing (1) by the TEXTILE REPLACEMENT RATIO. In the pervious step it was determined that 2.50% of all pillowslips used were new pillowslips placed into service to meet the expected demand.

Therefore;

$$\frac{1 \text{ pillowslip}}{.0250 \text{ replacement ratio}} = 40 \text{ uses per item}$$

**3. COST PER USE** – Determined by dividing the cost of the item by the uses per item. If a pillowslip costs \$2.21 each, then the cost per use would be computed as:

$$\frac{\$2.21 \text{ pillowslip cost}}{40 \text{ uses per item}} = \$.05525 \text{ per use}$$

The following table details the linen items used by each industry segment along with the pertinent specifications for that particular item. These replacement factors are a composite average of all the hospitality and healthcare projects conducted by Phillips & Associates since 1989 when the first publication on these factors was first done. The Gross Replacement factors have been updated every two to three years; because the actual data base has got some longevity and history, the firm of Phillips & Associates is now starting to develop some trend lines for each textile items shown.

The trend-lines will need some time to show the impact of a growing imported textile manufacturing process.

**2006 ACTUAL LINEN USAGE AND REPLACEMENT FACTORS FOR THE HOSPITALITY INDUSTRY**

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The Hospitality industry has long held that linen usage should be far longer than most facilities are experiencing. The following data is reflective of an extensive data base on all size and types of facilities worldwide. These are average numbers based on approximately 800 facilities. The linen usage and resultant replacement factors are included for all linen types, sizes and quality. Column-1 is a description of the specific linen item. Column-2 is the size of the item. Column-3 is the color of the item. Column-4 is the Gross Replacement Factor or percentage. This represents the number of new items put into circulation for every 100 items issued for use. Column-5 is the expected uses per item based on the Gross Replacement factor shown in Column-4. Column-6 is the weight of the item in pounds.

(1)	(2)		(3)	(4)	(5)	(6)
<u>ITEM DESCRIPTION</u>	<u>SIZE</u>	<u>BLEND</u>	<u>COLOR</u>	<u>GROSS REPLACEMENT FACTOR</u>	<u>EXPECTED USES PER/ITEM</u>	<u>WEIGHT OF ITEM</u>
<b>HOSPITALITY INDUSTRY, ROOM LINEN</b>						
BLANKETS, 3/4 DOUBLE	72X90	100% POLY	COLORED	2.74	36.5	2.250
BLANKETS, DOUBLE	80X90	100% POLY	COLORED	2.74	36.5	2.500
BLANKETS, KING/QUEEN	102X90	100% POLY	COLORED	2.74	36.5	3.250
BLANKETS, TWIN	66X90	100% POLY	COLORED	2.74	36.5	2.000
BLANKETS, 3/4-DOUBLE	72X90	100% ACRYLIC	COLORED	2.74	36.5	2.750
BLANKETS, DOUBLE	80X90	100% ACRYLIC	COLORED	2.74	36.5	3.000
BLANKETS, KING	108X90	100% ACRYLIC	COLORED	2.74	36.5	4.000
BLANKETS, QUEEN	90X90	100% ACRYLIC	COLORED	2.74	36.5	3.600
BLANKETS, TWIN	66X90	100% ACRYLIC	COLORED	2.74	36.5	2.500
BLANKETS, 3/4 DOUBLE	72X90	100% VELLUX	COLORED	2.74	36.5	2.330
BLANKETS, DOUBLE	80X90	100% VELLUX	COLORED	2.74	36.5	2.620
BLANKETS, KING	108X90	100% VELLUX	COLORED	2.74	36.5	3.420
BLANKETS, QUEEN	90X90	100% VELLUX	COLORED	2.74	36.5	2.790
BLANKETS, TWIN	66X90	100% VELLUX	COLORED	2.74	36.5	1.980
MATS, BATH	18X24	VARIES	WHITE	2.40	41.7	0.458
MATS, BATH	20X30	VARIES	WHITE	2.40	41.7	0.500
MATS, BATH	20X30	VARIES	WHITE	2.40	41.7	0.625
PADS, MATTRESS, DOUBLE	54X75	100% POLY	WHITE	1.90	52.6	2.240
PADS, MATTRESS, KING	78X80	100% POLY	WHITE	1.90	52.6	3.450
PADS, MATTRESS, QUEEN	60X80	100% POLY	WHITE	1.90	52.6	2.650
PADS, MATTRESS, TWIN	38X75	100% POLY	WHITE	1.90	52.6	1.580
PILLOWCASE, KING	42X46	50% C./50% P.	WHITE	2.15	46.5	0.311
PILLOWCASE, KING PERCALE	42X46	50% C./50% P.	COLORED	2.15	46.5	0.311
PILLOWCASE, STANDARD	42X34	50% C./50% P.	WHITE	2.15	46.5	0.229
PILLOWCASE, STANDARD	42X36	50% C./50% P.	WHITE	2.15	46.5	0.253
PILLOWCASE, REGULAR	42X34	100% COTTON	WHITE	4.17	24.0	0.271
PILLOWCASE, REGULAR	42X36	100% COTTON	WHITE	4.17	24.0	0.287
PILLOWCASE, KING	42X36	100% COTTON	WHITE	4.17	24.0	0.253
PILLOWS, KING DACRON II	20X36	100% DACRON	N/A	N/A	N/A	2.740
PILLOWS, QUEEN DACRON II	20X30	100% DACRON	N/A	N/A	N/A	2.280
PILLOWS, REGULAR DACRON II	20X26	100% DACRON	N/A	N/A	N/A	1.980
SHEET, FLAT, 3/4 DOUBLE	70X108	50% C./50% P.	WHITE	1.65	60.6	1.300
SHEET, FLAT, 3/4 DOUBLE	70X115	50% C./50% P.	WHITE	1.65	60.6	1.390
SHEET, FLAT, DOUBLE	81X104	50% C./50% P.	WHITE	1.65	60.6	1.450
SHEET, FLAT, DOUBLE	81X108	50% C./50% P.	WHITE	1.65	60.6	1.510
SHEET, FLAT, DOUBLE, COTTON	81X104	100% COTTON	WHITE	3.77	26.5	1.600

(1)	(2)	(3)	(4)	(5)	(6)	
ITEM DESCRIPTION	SIZE	BLEND	COLOR	GROSS REPLACEMENT FACTOR	EXPECTED USES PER/ITEM	WEIGHT OF ITEM
NAPKINS, PATTERNED	20X20	100% COTTON	COLORED	4.66	21.5	0.140
NAPKINS, PATTERNED	22X22	100% COTTON	WHITE	4.66	21.5	0.195
TABLECLOTHS, BEAUTI DAMASK	45X45	50% C./50% P.	COLORED	3.45	29.0	0.618
TABLECLOTHS, BEAUTI DAMASK	45X45	50% C./50% P.	WHITE	3.45	29.0	0.618
TABLECLOTHS, BEAUTI DAMASK	54X54	50% C./50% P.	WHITE	3.45	29.0	0.889
TABLECLOTHS, BEAUTI DAMASK	54X54	50% C./50% P.	COLORED	3.45	29.0	0.889
TABLECLOTHS, BEAUTI DAMASK	64X64	50% C./50% P.	COLORED	3.45	29.0	1.249
TABLECLOTHS, BEAUTI DAMASK	64X64	50% C./50% P.	WHITE	3.45	29.0	1.249
TABLECLOTHS, BEAUTI DAMASK	72X72	50% C./50% P.	WHITE	3.45	29.0	1.581
TABLECLOTHS, BEAUTI DAMASK	72X72	50% C./50% P.	COLORED	3.45	29.0	1.580
TABLECLOTHS, BEAUTI DAMASK	81X81	50% C./50% P.	COLORED	3.45	29.0	2.001
TABLECLOTHS, BEAUTI DAMASK	81X81	50% C./50% P.	WHITE	3.45	29.0	2.001
TABLECLOTHS, BEAUTI DAMASK	90X90	50% C./50% P.	COLORED	3.45	29.0	2.470
TABLECLOTHS, BEAUTI DAMASK	90X90	50% C./50% P.	WHITE	3.45	29.0	2.470
TABLECLOTHS, NO IRON COTTON	45X45	100% COTTON	COLORED	3.83	26.1	0.622
TABLECLOTHS, NO IRON COTTON	45X45	100% COTTON	WHITE	3.83	26.1	0.622
TABLECLOTHS, NO IRON COTTON	54X54	100% COTTON	WHITE	3.83	26.1	0.896
TABLECLOTHS, NO IRON COTTON	54X54	100% COTTON	COLORED	3.83	26.1	0.896
TABLECLOTHS, NO IRON COTTON	64X64	100% COTTON	COLORED	3.83	26.1	1.258
TABLECLOTHS, NO IRON COTTON	64X64	100% COTTON	WHITE	3.83	26.1	1.258
TABLECLOTHS, NO IRON COTTON	72X72	100% COTTON	WHITE	3.83	26.1	1.593
TABLECLOTHS, NO IRON COTTON	72X72	100% COTTON	COLORED	3.83	26.1	1.593
TABLECLOTHS, NO IRON COTTON	81X81	100% COTTON	WHITE	3.83	26.1	2.015
TABLECLOTHS, NO IRON COTTON	81X81	100% COTTON	COLORED	3.83	26.1	2.015
TABLECLOTHS, NO IRON COTTON	90X90	100% COTTON	WHITE	3.83	26.1	2.488
TABLECLOTHS, NO IRON COTTON	90X90	100% COTTON	COLORED	3.83	26.1	2.488
<b><u>HOSPITALITY INDUSTRY BANQUET LINEN</u></b>						
BANQUET CLOTHS, BEAUTI DAM/	54X110	50% C./50% P.	WHITE	3.75	26.7	1.811
BANQUET CLOTHS, BEAUTI DAM/	54X110	50% C./50% P.	COLORED	3.75	26.7	1.811
BANQUET CLOTHS, BEAUTI DAM/	54X120	50% C./50% P.	COLORED	3.75	26.7	1.976
BANQUET CLOTHS, BEAUTI DAM/	54X120	50% C./50% P.	WHITE	3.75	26.7	1.976
BANQUET CLOTHS, BEAUTI DAM/	54X72	50% C./50% P.	COLORED	3.75	26.7	1.185
BANQUET CLOTHS, BEAUTI DAM/	54X72	50% C./50% P.	WHITE	3.75	26.7	1.185
BANQUET CLOTHS, BEAUTI DAM/	54X90	50% C./50% P.	WHITE	3.75	26.7	1.482
BANQUET CLOTHS, BEAUTI DAM/	54X90	50% C./50% P.	COLORED	3.75	26.7	1.482
BANQUET CLOTHS, BEAUTI DAM/	64X110	50% C./50% P.	COLORED	3.75	26.7	2.147
BANQUET CLOTHS, BEAUTI DAM/	64X110	50% C./50% P.	WHITE	3.75	26.7	2.147
BANQUET CLOTHS, BEAUTI DAM/	64X120	50% C./50% P.	COLORED	3.75	26.7	2.342
BANQUET CLOTHS, BEAUTI DAM/	64X120	50% C./50% P.	WHITE	3.75	26.7	2.342
BANQUET CLOTHS, BEAUTI DAM/	64X90	50% C./50% P.	WHITE	3.75	26.7	1.756
BANQUET CLOTHS, BEAUTI DAM/	64X90	50% C./50% P.	COLORED	3.75	26.7	1.756
BANQUET CLOTHS, BEAUTI DAM/	72X110	50% C./50% P.	WHITE	3.75	26.7	2.415
BANQUET CLOTHS, BEAUTI DAM/	72X110	50% C./50% P.	COLORED	3.75	26.7	2.415
BANQUET CLOTHS, BEAUTI DAM/	72X120	50% C./50% P.	WHITE	3.75	26.7	2.635
BANQUET CLOTHS, BEAUTI DAM/	72X120	50% C./50% P.	COLORED	3.75	26.7	2.635
BANQUET CLOTHS, BEAUTI DAM/	54X110	100% Cotton	WHITE	3.83	26.1	1.811
BANQUET CLOTHS, BEAUTI DAM/	54X110	100% Cotton	COLORED	3.83	26.1	1.811

(1)	(2)	(3)	(4)	(5)	(6)	
<u>ITEM DESCRIPTION</u>	<u>SIZE</u>	<u>BLEND</u>	<u>COLOR</u>	<u>GROSS REPLACEMENT FACTOR</u>	<u>EXPECTED USES PER/ITEM</u>	<u>WEIGHT OF ITEM</u>
BANQUET CLOTHS, BEAUTI DAM/	54X120	100% Cotton	COLORED	3.83	26.1	1.976
BANQUET CLOTHS, BEAUTI DAM/	54X120	100% Cotton	WHITE	3.83	26.1	1.976
BANQUET CLOTHS, BEAUTI DAM/	54X72	100% Cotton	COLORED	3.83	26.1	1.185
BANQUET CLOTHS, BEAUTI DAM/	54X72	100% Cotton	WHITE	3.83	26.1	1.185
BANQUET CLOTHS, BEAUTI DAM/	54X90	100% Cotton	WHITE	3.83	26.1	1.482
BANQUET CLOTHS, BEAUTI DAM/	54X90	100% Cotton	COLORED	3.83	26.1	1.482
BANQUET CLOTHS, BEAUTI DAM/	64X110	100% Cotton	COLORED	3.83	26.1	2.147
BANQUET CLOTHS, BEAUTI DAM/	64X110	100% Cotton	WHITE	3.83	26.1	2.147
BANQUET CLOTHS, BEAUTI DAM/	64X120	100% Cotton	COLORED	3.83	26.1	2.342
BANQUET CLOTHS, BEAUTI DAM/	64X120	100% Cotton	WHITE	3.83	26.1	2.342
BANQUET CLOTHS, BEAUTI DAM/	64X90	100% Cotton	WHITE	3.83	26.1	1.756
BANQUET CLOTHS, BEAUTI DAM/	64X90	100% Cotton	COLORED	3.83	26.1	1.756
BANQUET CLOTHS, BEAUTI DAM/	72X110	100% Cotton	WHITE	3.83	26.1	2.415
BANQUET CLOTHS, BEAUTI DAM/	72X110	100% Cotton	COLORED	3.83	26.1	2.415
BANQUET CLOTHS, BEAUTI DAM/	72X120	100% Cotton	WHITE	3.83	26.1	2.635
BANQUET CLOTHS, BEAUTI DAM/	72X120	100% Cotton	COLORED	3.83	26.1	2.635

