

To:

CIB W117 Performance Measurement in Construction

Subject: IRC 2017 Alpha Inspections

Joseph Kashiwagi inspected IRC on May 2-3, 2017 for the Alpha Certification. The total of 29 jobs were inspected and 80 jobs were surveyed with a total square footage of 3M. None of their clients have a current reported leak.

Below are the dominant results from 2017 IRC Alpha Inspection:

- 29 jobs inspected, 80 jobs surveyed (Total of 3 M SF)
- 9.8 out of 10 overall customer satisfactions
- 100% jobs with no current leaks
- 100% of customers would hire IRC again
- 0.00% roof area blistered (1774 SF of total blisters)
- Silicone – 29 roofs (100%)

Please let me know if you have any questions. You can contact me at 480-313-4488

Thank you.

**Joseph Kashiwagi**

*Program Director*

**Kashiwagi Solution Model**

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Enclosed Attachments:

- Attachment A - Overall Performance Information
- Attachment B – Year Comparison
- Attachment C - Inspection Results
- Attachment D - Percent Blistered
- Attachment E - Survey Results

## Attachment A – IRC 2017 Overall Performance Information

No	Criteria	Unit
1	Overall customer satisfaction - Contractors	(1-10)
2	Oldest job surveyed	Years
3	Average age of jobs inspected	Years
4	Age sum of all projects that never leaked	Years
5	Age sum of all projects that do not leak	Years
6	Percent of customers that would purchase again	%
7	Percent of jobs that do not leak	%
8	Percent of jobs completed on time	%
9	Percent of satisfied customers	%
10	Percent of inspected roofs with less than 5% ponded water	%
11	Percent of inspected roofs with less than 1% deterioration	%
12	Percent of inspected roofs with less than 1/4" slope	%
13	Total job area (of job surveyed and inspected)	SF
14	Total number of returned surveys / Number of jobs surveyed	#
15	Total number of jobs inspected	#
16	Total number of different clients	#
17	Date of next roof inspection	Date

2017	Average Alpha Contractor	Difference
9.8	9.6	0.2
31	18	13.3
14	9	5.6
1,134	261	872.8
1,403	350	1052.9
98%	99%	-2%
100%	100%	0%
100%	99%	1%
100%	100%	0%
100%	89%	11%
100%	95%	5%
76%	65%	11%
3,023,500	1,664,274	1,359,226
80 / 108		
29	25	4.3
15	42	-26.8
6/19/2019		

### Attachment B – Year Comparison

No	Criteria	Unit	Overall	2011	2013	2015	2017
1	Overall customer satisfaction - Contractors	(1-10)	9.8	9.8	9.9	9.9	9.8
2	Oldest job surveyed	Years	33	29	31	26	31
3	Average age of jobs surveyed	Years	13	11	7	8	14
4	Average age sum of all projects that never leaked	Years	488	376	575	998	1,134
5	Average age sum of all projects that do not leak	Years	683	493	631	901	1,403
6	Percent of customers that would purchase again	%	100%	100%	100%	100%	98%
7	Percent of jobs that do not leak	%	100%	100%	100%	100%	100%
8	Percent of jobs completed on time	%	100%	100%	100%	100%	100%
9	Percent of satisfied customers	%	100%	100%	100%	100%	100%
10	Percent of inspected roofs with less than 5% ponded water	%	96%	97%	97%	100%	100%
11	Percent of inspected roofs with less than 1% deterioration	%	99%	100%	97%	100%	100%
12	Percent of inspected roofs with less than 1/4" slope	%	73%	92%	94%	3%	76%
13	Average job area (projects)	SF	67,782	109,302	60,999	36,975	37,794
14	Average job area (of job surveyed and inspected)	SF	4,153,205	5,177,878	5,428,887	4,363,027	3,023,500
15	Average number of returned surveys / Number of jobs surveyed	#	54 / 148	50 / 52	89 / 357	90 / 549	80 / 108
16	Average number of jobs inspected	#	43	30	34	30	29
17	Average number of different customers surveyed & inspected	#	24	11	21	59	15
18	Total number of inspections	#	9	#6	#7	#8	#9

**Attachment C – Inspection Results**

Owner	Job Area	Original Install Date	Insp. Date	Slope More than 1/4"	SF of Roof Ponding	Gran / Agg	# of Penetrations	SF of Blisters	Sf of Delamination	SF of Mech. Damage	SF of Bird Pecks	SF of Repair	SF of Deterioration	Inspector
Advanced Distribution	91260	8/1/1990	5/3/2017	0	0	G	10	0	0	0	0	0	0	JK
Advanced Distribution	40216	4/18/2007	5/2/2017	0	1	G	0	0	0	0	0	0	0	JK
KY Association of EC	53985	10/11/1988	5/2/2017	1	200	G	30	20	0	0	0	0	100	JK
Parker Commercial Storage	78228	1/1/2000	5/2/2017	1	0	G	40	0	400	0	0	0	200	JK
Advanced Distribution	305273	7/1/1992	5/3/2017	0	0	A	154	0	0	0	0	0	50	JK
NAFC Schools - Floyd Central HS	175000	5/7/1999	5/3/2017	0	100	G	277	150	0	0	0	350	0	JK
NAFC Schools - Hazelwood Jr. HS	131306	4/7/2004	5/3/2017	0	40	G	120	250	200	0	0	0	1000	JK
NAFC Schools - Prosser Voc. School	82012	8/12/1989	5/3/2017	0	0	G	146	100	0	0	0	500	30	JK
GE	418810	1/1/1986	5/2/2017	1	40	G	75	34	0	0	0	0	780	JK
GE	258200	1/1/1986	5/2/2017	1	0	G	100	110	0	100	0	0	450	JK
GE	192683	1/1/1990	5/2/2017	1	0	G	150	0	0	0	0	0	50	JK
GE	258426	1/1/1991	5/2/2017	1	150	G	200	0	0	0	0	0	50	JK
GE	212517	8/1/1991	5/2/2017	1	50	G	200	50	0	0	0	0	100	JK
GE	360000	1/1/1986	5/2/2017	1	50	G	75	60	0	0	0	0	680	JK
GE	112000	11/5/1988	5/2/2017	1	175	G	175	20	0	0	0	0	60	JK
GE	260000	1/1/1987	5/2/2017	1	20	G	93	70	0	0	0	0	150	JK
GE	100000	1/1/1986	5/2/2017	1	40	G	100	5	0	0	0	0	150	JK
GE	100000	1/1/1986	5/2/2017	1	8	G	100	0	20	0	0	0	4	JK
GE	728000	1/1/1986	5/2/2017	1	200	G	100	200	0	100	0	0	700	JK
GE	255500	1/1/1991	5/2/2017	1	0	G	200	0	0	0	0	0	50	JK
GE	204000	1/1/1990	5/2/2017	1	0	G	150	0	0	0	0	0	100	JK
GE	250000	8/1/1991	5/2/2017	1	50	G	145	50	0	0	0	0	100	JK
GE	152689	11/28/2000	5/2/2017	1	0	G	150	0	0	0	0	0	0	JK
GE	339104	6/20/2002	5/2/2017	1	0	G	150	0	6	0	0	0	0	JK
GE	750307	11/28/2000	5/2/2017	1	300	G	100	0	0	0	0	0	3500	JK
GE	1E+06	11/28/2000	5/2/2017	1	0	G	100	0	0	0	0	0	0	JK
GE	167610	11/28/2000	5/2/2017	1	0	G	50	0	0	0	0	0	0	JK
GE	40218	11/28/2000	5/2/2017	1	350	G	175	800	0	0	0	0	0	JK

**Attachment D – Percent Blistered**

Owner	Job Name	Street Address	City	State	Job Area	Date Installed	SF of Blisters	% of Roof Blistered
Advanced Distribution	Left side of driveway	3301 Dixie Highway	Louisville	KY	91260	8/1/1990	0	0.00%
Advanced Distribution	Millers Ln	2349 Millers Lane	Louisville	KY	40216	4/18/2007	0	0.00%
KY Association of EC		4515 Bishop Lane	Louisville	KY	53985	10/11/1988	20	0.04%
Parker Commercial Storage	Parker Commercial Storage	2900 S. 7th St., Rm. 26,28,29	Louisville	KY	78228	1/1/2000	0	0.00%
Advanced Distribution	Right Side of driveway	3301 Dixie Highway	Louisville	KY	305273	7/1/1992	0	0.00%
NAFC Schools - Floyd Central HS	Lower Section	6575 Old Vincennes Rd.	Floyds Knob	IN	175000	5/7/1999	150	0.09%
NAFC Schools - Hazelwood Jr. HS	New section	Hazlewood Ave.	New Albany	IN	131306	4/7/2004	250	0.19%
NAFC Schools - Prosser Voc.	A1 & A2	4202 Charlestown Road	New Albany	IN	82012	8/12/1989	100	0.12%
GE	Bldg1 - Section 1	Applicance Park	Louisville	KY	418810	1/1/1986	34	0.01%
GE	Bldg2 - North Section	Applicance Park	Louisville	KY	258200	1/1/1986	110	0.04%
GE	Bldg4 - Section 2	Applicance Park	Louisville	KY	192683	1/1/1990	0	0.00%
GE	Bldg4 - Section 5	Applicance Park	Louisville	KY	258426	1/1/1991	0	0.00%
GE	Bldg5 -	Applicance Park	Louisville	KY	212517	8/1/1991	50	0.02%
GE	Bldg1 - Main Center Section	Applicance Park	Louisville	KY	360000	1/1/1986	60	0.02%
GE	Bldg1 - Main Southeast	Applicance Park	Louisville	KY	112000	11/5/1988	20	0.02%
GE	Bldg2 - South Section	Applicance Park	Louisville	KY	260000	1/1/1987	70	0.03%
GE	Bldg2 - Office	Applicance Park	Louisville	KY	100000	1/1/1986	5	0.01%
GE	Bldg2 - Accounts Payable	Applicance Park	Louisville	KY	100000	1/1/1986	0	0.00%
GE	Bldg3	Applicance Park	Louisville	KY	728000	1/1/1986	200	0.03%
GE	Bldg4 - Main South	Applicance Park	Louisville	KY	255500	1/1/1991	0	0.00%
GE	Bldg4 - North Section Main	Applicance Park	Louisville	KY	204000	1/1/1990	0	0.00%
GE	Bldg5 - Northwest Corner	Applicance Park	Louisville	KY	250000	8/1/1991	50	0.02%
GE	Bldg5 -	Applicance Park	Louisville	KY	152689	11/28/2000	0	0.00%
GE	Ge Ap #6	Applicance Park	Louisville	KY	339104	6/20/2002	0	0.00%
GE	Bldg10 - Phase I	Applicance Park	Louisville	KY	750307	11/28/2000	0	0.00%
GE	Bldg10 - Phase II	Applicance Park	Louisville	KY	1E+06	11/28/2000	0	0.00%
GE	Bldg10 - Phase III - Section G	Applicance Park	Louisville	KY	167610	11/28/2000	0	0.00%
GE	Bldg35	Applicance Park	Louisville	KY	40218	11/28/2000	800	1.99%

### Attachment E – Survey Results

Owner	Job Name	Job Area	Original Install Date	Contact Name	Overall	On-Time?	Satisfied?	Purchase?	Leaked?	Cur Leak?
Basf Catalysts, Llc	Basf Catalysts, Llc	72,000	7/1/2010	A.j. Turner	7	1	1	0	1	0
Basf Catalysts, Llc	Basf Catalysts, Llc	108,000	11/29/2010	A.j. Turner	7	1	1	0	1	0
Coles County Memorial Airport	Coles County Memorial Airport	9,000	6/9/2011	Andrew Fearn	9	1	1	1	1	0
University of KY	Gluck Equine Research Ctr	8,091	8/1/2011	Dave Tyler	9	1	1	1	0	0
University of KY	Peterson Service Building	12,350	6/30/2010	Dave Tyler	9	1	1	1	0	0
University of KY	Law Building	28,600	11/29/2011	Dave Tyler	9	1	1	1	0	0
University of KY	Mrisc Building	5624	6/27/2011	Dave Tyler	9	1	1	1	0	0
University of KY	Slone Research Bldg	11530	10/8/2009	Dave Tyler	9	1	1	1	1	0
University of KY	Chemistry/Physics Bldg.	37060	9/19/2001	Dave Tyler	9	1	1	1	1	0
United States Enrichment Corp.	Usec X-700 & X-102 & X-640-1	26760	8/17/2009	Maintenance	9	1	1	1	1	0
GE	Bldg1 - Section 1	418810	1/1/1986	Tom Fairfax	10	1	1	1	0	0
GE	Bldg2 - North Section	258200	1/1/1986	Tom Fairfax	10	1	1	1	0	0
GE	Bldg4 - Section 2	192683	1/1/1990	Tom Fairfax	10	1	1	1	0	0
GE	Bldg4 - Section 5	258426	1/1/1991	Tom Fairfax	10	1	1	1	0	0
GE	Bldg5 -	212517	8/1/1991	Tom Fairfax	10	1	1	1	0	0
GE	Bldg1 - Main Center Section	360000	1/1/1986	Tom Fairfax	10	1	1	1	0	0
GE	Bldg1 - Main Southeast	112000	11/5/1988	Tom Fairfax	10	1	1	1	0	0
GE	Bldg2 - South Section	260000	1/1/1987	Tom Fairfax	10	1	1	1	0	0
GE	Bldg2 - Office	100000	1/1/1986	Tom Fairfax	10	1	1	1	0	0
GE	Bldg2 - Accounts Payable	100000	1/1/1986	Tom Fairfax	10	1	1	1	0	0
GE	Bldg3	728000	1/1/1986	Tom Fairfax	10	1	1	1	0	0
GE	Bldg4 - Main South	255500	1/1/1991	Tom Fairfax	10	1	1	1	0	0
GE	Bldg4 - North Section Main	204000	1/1/1990	Tom Fairfax	10	1	1	1	0	0
GE	Bldg5 - Northwest Corner	250000	8/1/1991	Tom Fairfax	10	1	1	1	0	0
GE	Bldg5 -	152689	11/28/2000	Tom Fairfax	10	1	1	1	0	0

Owner	Job Name	Job Area	Original Install Date	Contact Name	Overall	On-Time?	Satisfied?	Purchase?	Leaked?	Cur Leak?
GE	Ge Ap #6	339104	6/20/2002	Tom Fairfax	10	1	1	1	0	0
GE	Bldg10 - Phase I	750307	11/28/2000	Tom Fairfax	10	1	1	1	0	0
GE	Bldg10 - Phase II	1037600	11/28/2000	Tom Fairfax	10	1	1	1	0	0
GE	Bldg10 - Phase III	167610	11/28/2000	Tom Fairfax	10	1	1	1	0	0
GE	Bldg35	40218	11/28/2000	Tom Fairfax	10	1	1	1	0	0
Coleman's Store	Coleman's Drug Store	2230	10/28/2016	Alfred Pence	10	1	1	1	0	0
Industry Capital	Industry Capital	114021	5/4/2015	Andy Ramirez	10	1	1	1	0	0
Industry Capital	Industry Capital	275000	5/17/2016	Andy Ramirez	10	1	1	1	0	0
Industry Capital	Industry Capital	245000	4/27/2016	Andy Ramirez	10	1	1	1	0	0
Reality Co.	Park Terrace Cond.	13000	11/17/2004	Ben Adams	10	1	1	1	1	0
Reality Co.	Village Drive Condos	5150	11/23/2004	Ben Adams	10	1	1	1	1	0
University of KY	Hsrb Building	20027	6/24/2010	Dave Tyler	10	1	1	1	0	0
University of KY	Astecc Bulding	24,947	11/15/2011	Dave Tyler	10	1	1	1	0	0
University of KY	good Samaritan Hospital	5,836	9/26/2011	Dave Tyler	10	1	1	1	0	0
University of KY	Peterson Service Building	7,700	11/10/2009	Dave Tyler	10	1	1	1	0	0
University of KY	Boone Tennis Center	36,960	11/3/2010	Dave Tyler	10	1	1	1	0	0
University of KY	Business & Economics Bldg	31,207	6/14/2011	Dave Tyler	10	1	1	1	0	0
University of KY	Nutter Training Facility	48,500	10/8/2010	Dave Tyler	10	1	1	1	0	0
University of KY	Cooper Dairy	11898	10/21/2009	Dave Tyler	10	1	1	1	0	0
University of KY	Kentucky Clinic & Medical	80965	10/12/2010	Dave Tyler	10	1	1	1	0	0
University of KY	Chandler Medical	25667	8/14/2008	Dave Tyler	10	1	1	1	0	0
University of KY	Dental Wing	15252	9/13/2010	Dave Tyler	10	1	1	1	0	0
University of KY	Chandler Medical Center	23520	9/7/2010	Dave Tyler	10	1	1	1	0	0
University of KY	Tobacco & Health Bldg.	11098	9/27/2002	Dave Tyler	10	1	1	1	0	0

Owner	Job Name	Job Area	Original Install Date	Contact Name	Overall I	On-Time ?	Satisfied ?	Purchase ?	Leaked ?	Cur Leak?
University of KY	Digital Village Phase li	8010	2/2/2011	Dave Tyler	10	1	1	1	0	0
University of KY	Robotics	13245	10/26/2011	Dave Tyler	10	1	1	1	1	0
University of KY	M.i.k. Bldg	13000	11/29/2006	Dave Tyler	10	1	1	1	1	0
University of KY	Singletary Center For Arts	20102	7/13/2011	Dave Tyler	10	1	1	1	1	0
University of KY	Lancaster Aquatic Center	10147	9/13/2010	Dave Tyler	10	1	1	1	1	0
University of KY	Thomas Hunt Morgan	24246	11/13/2008	Dave Tyler	10	1	1	1	1	0
University of KY	Lexington Community	23748	4/30/2003	Dave Tyler	10	1	1	1	1	0
University of KY	Lexington Community	24427	10/21/2003	Dave Tyler	10	1	1	1	1	0
First Southern Bank	Extra Bldg	16600	6/25/2015	David Sullivan	10	1	1	1	0	0
First Southern Bank	Interior Journal	2050	10/28/2016	David Sullivan	10	1	1	1	0	0
Mr. Don Benfield	Evergreen Center	7788	3/14/2005	Don Benfield	10	1	1	1	0	0
Mr. Don Benfield	Broil Brick	5179	7/31/2007	Don Benfield	10	1	1	1	0	0
Blackburn's Chimney Sweeps, Inc.	Blackburn's Chimney Sweep, Inc	6000	5/7/2001	Debbie	10	1	1	1	0	0
Blackburn's Chimney Sweeps, Inc.	Blackburn's Chimney Sweeps, I	6375	9/3/2004	Debbie	10	1	1	1	0	0
US Enrichment Corp.	United States Enrichment Corp.	6300	11/9/2006	Maintenance	10	1	1	1	0	0
US Enrichment Corp.	United States Enrichment Corp.	9228	11/9/2006	Maintenance	10	1	1	1	0	0
US Enrichment Corp.	Fire Dept & Hospital	25084	6/20/2002	Maintenance	10	1	1	1	0	0
US Enrichment Corp.	Usec Bldg #705 & #710	34048	8/21/2001	Maintenance	10	1	1	1	0	0
US Enrichment Corp.	United States Enrichment	10625	10/26/2006	Maintenance	10	1	1	1	0	0
US Enrichment Corp.	United States Enrichment	30534	9/20/2005	Maintenance	10	1	1	1	0	0
US Enrichment Corp.	United States Enrichment	63550	10/23/2008	Maintenance	10	1	1	1	0	0
R P I Graphic Data Solutions	RPI Bldg.	29500	4/20/1999	Ed Nelson	10	1	1	1	0	0
Metro Development	Metro Bldg.-2	10,980	4/14/1999	Ed Nelson	10	1	1	1	0	0