Things You Need to Know	LightWorks in ArchiCA	Think Like a Photographer		16	Dwight's Quick Start: Fundamental			
What Photographers Do Why Tour Lighting Isn't Enough 16 Establishing the Model 27 Concers 17 Concers 17 Concers 17 Concers 18 Light Grant Photography School 19 School 19 Light Grant Photography School 19 School 19 Light Grant Photography School 19 School 19 School 19 School 19 School 19 Light Grant Photography School 19						16	Light Works Illustration Procedure	27
Things in this Book    Concepts				What Photographers Do		16		
Artifice Makes Things Real   17	Dwight Atkinson					16	· ·	
Concepts 17 The Utilitarian Option 27 Left Basic Principle 18 Left the Busic Frinciple							The Womer of the Strategies	27
Lighting a Scene   18	Things in this Book			· ·			The Utilitarian Ontion	27
The Basic Principle				<u> -</u>				
Quick Photography School   18					18	10		
1. Key Light				_		18		
2. Modeling Light					18			
S.Fill Light							The Vastly Superior Option	28
Experiment Procedure					18			
Setting the Scene	Chapter One Randering		Q	Experiment Procedure		19		
Setting the Scene	Chapter One. Rendering		O			19	-	
Setting the Scene Why You Want this Book Optimizing Effort Size 1. Making the Best Rendering 9							Placing Light Sources	29
Why You Want this Book   8   Engine: LightWorks Rendering Engine   20   SkyObject (Modeling Light)   30   31   31   32   32   34   34   34   34   34   34	Setting the Scene		8	PhotoRendering Dialog		20		
Optimizing Effort  1. Making the Best Rendering 2. Making the Optimal Rendering 9 2. Making the Optimal Rendering 9 2. Making the Optimal Rendering 9 2. It The ArchiCAD Legacy 9 3. The New Light Works Rendering Engine 9 2. The OpenGA Rendering Engine 9 3. The New Light Works Rendering Engine 9 4. What the Sock is Not Eetter Imaging Technology 10 5. Sun Che Light Works Built-in Sun) Eetter: Maxon Cinema 4D 10 What this Book is Not 10 Shadow Assing 22 What this Book is Not 10 Shadow Assing 23 Shadow Resolution 25 Shadow Resolution 26 Shadow Resolution 27 Shadow Resolution 27 Shadow Resolution 28 Shadow Resolution 29 Shadow Resolution 20 Shadow Resolution 21 Shadow Resolution 22 Shadow Resolution 22 Shadow Resolution 23 Shadow Resolution 25 Shadow Resolution 25 Shadow Resolution 26 Shadow Resolution 27 Shadow Resolution 28 Shadow Resolution 29 Shadow Resolution 20 Shadow Resolution							SkyObject (Modeling Light) 30	
2. Making the Best Rendering 9 2. Making the Optimal Rendering 9 3. Making the Optimal Rendering 9 4. Making the Optimal Rendering 9 4. Making the Optimal Rendering Engine 9 4. The ArchitCAD Internal Rendering Engine 9 3. The New Light Works Rendering Engine 9 3. The New Light Works Rendering Engine 9 4. The Optimal Rendering Engine 9 5. The Optimal Rendering Engine 9 6. The Optimal Rendering Engine 9 7. The ArchitCAD Internal Rendering Engine 9 8. Render Method for Overlapping Glass 21								
Adaking the Optimal Rendering 9 Light Sources Global Control  Maintain Continuity with the ArchicAD Legacy 9 Light Sources Global Control  Minimatin Continuity with the ArchicAD Internal Rendering Engine 9 Light Sources Medicing Engine 9 Lise Final or Best Antialiasing Setting 21 Assembling Light Source Components 33 Material Editing Just One Example 33 Material Editing Just One Example 33 Material Editing Light Source Components 35 Material Editing Light Source Components 36 Material Editing Light Source Components 37 Material Editing Light Source Components 38 Material Editing Light Source Components 40 Material Editing Light So		9	O				e e	
Maintain Continuity with the ArchicAD Legacy 1. The ArchicAD Internal Rendering Engine 9 2. The OpenGL Rendering Engine 9 3. The New Light Works Rendering Engine 9 4. What You Can Expect for Imaging Quality 9 5. Render Method and Antialiasing 21 6. What You Can Expect for Imaging Quality 9 6. Render Method for Overlapping Glass 21 6. Material Editing: Just One Example 33 6. Material Editing: Just One Example 33 6. Relative Light Intensity and Scene Color 33 6. Relative Light Intensity and Scene Color 34 6. Ambient 22 6. Relative Light Intensity and Scene Color 34 6. Ambient 22 7. What this Book is Not 10 7. Shadow Casting 22 7. What "Rendering" Is 11 7. Shadow Resolution 22 8. Success through Manual Control 14 8. Storyteller's Vision 14 8. Storyteller's Vision 14 8. Storyteller's Vision 14 8. Doth Minds are Beter than None 14 8. Doth Minds Working Together 14 8. Employing Obtuse Thinking 15 8. Harmonizing Imagery by Reducing Color 15 8. Stick with Stills 15 8. Scanning Negatives or Digital Photography? 15 8. Scanning Negatives or Digital Photography? 15 8. Scanling Negatives or Digital Photography? 15 8. Scaled Image 25 9 Palin 25 8. Scaled Image 25 9 Palin 25 8. Scaled Image 25 9 Palin 25 8. Scanling Redering Engine 20 8. Sasembling Light Source Components 33 8. Assembling Light Source Components 32 8. The Vertical Scale Interior Lamps 21 8. Plant Scale Interior Lamps 21 8. Proved The Light Works Built-In Sun 22 8. Plant Scale Image 25 8. Sas State Vertical Scale Interior Lamps 21 8. Sas Sas State In Scale Interior Lamps 21 8. Sas Sas Scale Interior Lamps 21 8. Sas Sa				e e e e e e e e e e e e e e e e e e e				
1. The ArchicAD Internal Rendering Engine 9 2. The OpenGL Rendering Engine 9 3. The New Light Works Rendering Engine 9 What You Can Expect for Imaging Quality 9 Better Imaging Technology 10 Better Indiana Sample 10 Even Better: Maxon Cinema 4D 10 Even Better: Maxon Cinema 4D 10 What this Book is Not 10 Even Better: Maxon Cinema 4D 10 What imaging Ideas from my First Book 11 Success through Manual Control 14 Two Minds are Better than None 14 11. Artist Mind (Subjective) 14 Both Minds Working Together 15 Sick with Stills 15 Scanning Negatives or Digital Photography? 15  Same Scaled Image 25 Final Photography? 15  Render Method and Antialiasing 21 Lise Final or Best Antialiasing Setting 21 Lise Final or Best Antialiasing Setting 21 Material Editing: Just One Example 33 Five-Minute Photofinishing 35  Five-Minute Photofinishing 32  Five-Minute Photofinishing 42  Five-Minute Photofinishin		Legacy	9	Light Sources Global Control		20		
2. The OpenGL Rendering Engine 9 3. The New Light Works Rendering Engine 9 What You Can Expect for Imaging Quality Better Imaging Technology Better: Abvent Artlantis R 10 Even Better: Maxon Cinema 4D 10 What "Rendering" Is  Revisiting Ideas from my First Book Is Success through Manual Control 14 Storyteller's Vision 14 Storyteller's Vision 14 Two Minds are Better than None 14 Is Opeth Cue 22 Abechanic's Mind (Objective) 14 Employing Obtuse Thinking 15 Scanning Negatives or Digital Photography? 15 Scanning Negatives or Digital Photography? 15 Light Works Environ Manual Control Is Graduated 15 Scanling Negatives or Digital Photography? 15 Light Works Environ Manual Control Is Graduated 15 Scanling Negatives or Digital Photography? 15 Scanling Negatives or Digital Photography? 15 Light Works Environ Method and Antialiasing 21 Light Morks Environ Glass 21 Light Works Environ 22 Sun (The Light Works Built-In Sun) 22 Five-Minute Photofinishing 33 Relative Light Intensity and Scene Color 33 Five-Minute Photofinishing 22 Five-Minute Photofinishing 35 Relative Light Intensity and Scene Color 35 Five-Minute Photofinishing 22 Five-Minute Photofinishing 21 Five-Minute Photofinishing 22 Five-Minute Photofinishing 21 Five-Minute P							Interior Lamps 33	
S. The New Light Works Rendering Engine 9 What You Can Expect for Imaging Quality 9 Render Method for Overlapping Glass 21 Better Imaging Technology 10 Better Imaging Technology 10 Better Abvent Artlantis R 10 Even Better: Maxon Cinema 4D 10 What this Book is Not 10 What this Book is Not 11 Success through Manual Control 14 Storyteller's Vision 14 I Artist's Mind (Subjective) 14 Both Minds Working Together 14 Employing Obtuse Thinking 15 Stack with Stills 5 Scanning Negatives or Digital Photography? 15 Scaled Image 25 Stack all Image 25 Scaled Image 25 Scaled Image 25 That Special Check Box 26 Sun (The Light Works Built-In Sun) 22 Relative Light Intensity and Scene Color 33 Relative Light University and Scene Color 35 Five-Minute Photofinishing 35 Relative Light University and Scene Color 35 Five-Minute Photofinishing 35 Relative Light University and Scene Color 35 Five-Minute Photofinishing 35 Selative Light University and Scene Color 35 Five-Minute Photofinishing 35 Selative Light University and Scene Color 35 Five-Minute Photofinishing 35 Selative Light University and Scene Color 35 Five-Minute Photofinishing 35 Selative Light University and Scene Color 35 Five-Minute Photofinishing 35 Selative Light University and Scene Color 35 Five-Minute Photofinishing 35 Selative Light University and Scene Color 35 Five-Minute Photofinishing 35 Selative Light University and Scene Color 35 Five-Minute Photofinishing 35 Selative Light University and Scene Color 35 Five-Minute Photofinishing 35 Selative Light University and Scene Color 35 Five-Minute Photofinishing 35 Selative Light University and Scene Color 35 Five-Minute Photofinishing 35 Selative Light University and Scene Color 35 Five-Minute Photofinishing 35 Five-Minute Light Works Environment 22 Fore						21	11: 1:1:0	0.0
Better Imaging Technology Better: Abvent Artlantis R Better: Abvent Artlantis R Even Better: Maxon Cinema 4D What this Book is Not What this Book is Not What "Rendering" Is    10		9						
Better Imaging Technology 10		y	9					
Better: Ābvent Artlantis R 10		1						
Even Better: Maxon Cinema 4D What this Book is Not What "Rendering" Is  Revisiting Ideas from my First Book Jack Bunch of Dots Success through Manual Control Storyteller's Vision 14 None 14 Storyteller's Vision 15 Light Works Environment 16 Foreground Shader None 17 None 18 None 19 None 25 Stick with Stills None 25 Scanning Negatives or Digital Photography? 15 None 15 None 25 None 26 None 25 None 26 None 25 None 26 None 25 None 25 None 26 None 25 None 25 None 26 None 25 None 26 None 26 None 27 None 27 None 28 None 29 None 20 None 20 None 25 None 26 None 26 None 27 None 28 None 29 None 20 None 20 None 20 None 20 None 20 None 25 None 26 None 26 None 27 None 27 None 28 None 29 None 20 Non		10					Five-Minute Photofinishing	35
What this Book is Not What "Rendering" Is    Shadow Casting   Shadow Resolution   Shadow   Shadow Resolution   Shadow Resolution   Shadow Resolution   Shadow Resolution   Shadow   Sh	Even Better: Maxon Cinema 4D							
What "Rendering" Is    Shadow Resolution   22	What this Book is Not		10	*				
Revisiting Ideas from my First Book  Just a Bunch of Dots Success through Manual Control Storyteller's Vision 14 None 22 Two Minds are Better than None 14 Depth Cue 22 1. Artist's Mind (Objective) 14 Fog 22 Rechanic's Mind (Objective) 14 Fog Light Ground Fog 23 Both Minds Working Together 14 Ground Fog 23 Employing Obtuse Thinking 15 Snow 24 Harmonizing Imagery by Reducing Color Stick with Stills Scanning Negatives or Digital Photography? 15 Clouds Graduated Image Plain 19 Caled Image Plain 25 That Special Check Box 26  That Special Check Box	What "Rendering" Is			•				
Success through Manual Control 14 Storyteller's Vision 14 None 22 Two Minds are Better than None 14 Depth Cue 22 1. Artist's Mind (Subjective) 14 Fog 22 2. Mechanic's Mind (Objective) 14 Fog 23 Both Minds Working Together 14 Fog Light 23 Employing Obtuse Thinking 15 Snow 24  Stick with Stills 15 Scanning Negatives or Digital Photography? 15 Clouds 25 Graduated 25 Image 25 Plain 25 Scaled Image 25 Flain Special Check Box 26 That Special Check Box	C			Situation Resolution	22			
Success through Manual Control 14 Storyteller's Vision 14 None 22 Two Minds are Better than None 14 Depth Cue 22 1. Artist's Mind (Subjective) 14 Fog 22 2. Mechanic's Mind (Objective) 14 Fog Light 23 Both Minds Working Together 14 Fog Light 23 Employing Obtuse Thinking 15 Snow 24 Stick with Stills 15 Scanning Negatives or Digital Photography? 15 Graduated 25 Image 25 Plain 25 Scaled Image 25 Flain Special Check Box 26 That Special Check Box 26	Revisiting Ideas from my First Book		13	LightWorks Environment		22		
Storyteller's Vision 14 None 22 Two Minds are Better than None 14 Depth Cue 22 1. Artist's Mind (Subjective) 14 Fog 22 2. Mechanic's Mind (Objective) 14 Fog Light 23 Both Minds Working Together 14 Ground Fog 23 Employing Obtuse Thinking 15 Snow 24 Harmonizing Imagery by Reducing Color 15 Sackground Shader 25 Stick with Stills 15 None 25 Scanning Negatives or Digital Photography? 15 Clouds 25 Graduated 25 Image 25 Plain 25 Scaled Image 25 Scaled Image 25 That Special Check Box 26		13		8				
Storyteller's Vision 14 None 22 Two Minds are Better than None 14 Depth Cue 22 1. Artist's Mind (Subjective) 14 Fog 22 2. Mechanic's Mind (Objective) 14 Fog Light 23 Both Minds Working Together 14 Ground Fog 23 Employing Obtuse Thinking 15 Snow 24 Harmonizing Imagery by Reducing Color 15 Snow 24 Stick with Stills 15 None 25 Scanning Negatives or Digital Photography? 15 Clouds 25 Graduated 25 Graduated 25 Image 25 Plain 25 Scaled Image 25 That Special Check Box 26	Success through Manual Control	14		Foreground Shader		22		
1. Artist's Mind (Subjective) 14 Fog Selection 22 Selection 22 Selection 22 Selection 22 Selection 23 Selection 23 Selection 23 Selection 24 Selection 25 Selecti	•			=	22			
2. Mechanic's Mind (Objective) 14 Fog Light 23 Both Minds Working Together 14 Ground Fog 23 Employing Obtuse Thinking 15 Snow 24 Harmonizing Imagery by Reducing Color 15 Background Shader 25 Stick with Stills 15 None 25 Scanning Negatives or Digital Photography? 15 Clouds 25 Graduated 25 Image 25 Plain 25 Scaled Image 25 Scaled Image 25 That Special Check Box 26				Depth Cue	22			
Both Minds Working Together 14 Ground Fog 23 Employing Obtuse Thinking 15 Snow 24  Harmonizing Imagery by Reducing Color 15 Background Shader 25  Stick with Stills 15 None 25  Scanning Negatives or Digital Photography? 15 Clouds 25  Graduated 25  Image 25  Plain 25  Scaled Image 25  Scaled Image 25  That Special Check Box 26				Fog	22			
Employing Obtuse Thinking 15 Snow 24  Harmonizing Imagery by Reducing Color 15  Stick with Stills 15  Scanning Negatives or Digital Photography? 15  Clouds 25  Graduated 25  Image 25  Plain 25  Scaled Image 25  Scaled Image 25  That Special Check Box 26				Fog Light	23			
Harmonizing Imagery by Reducing Color 15 Stick with Stills 15 None 25 Scanning Negatives or Digital Photography? 15 Clouds 25 Graduated 25 Image 25 Ilmage 25 Plain 25 Scaled Image 25 Scaled Image 25 That Special Check Box 26				•				
Stick with Stills 15 None 25 Scanning Negatives or Digital Photography? 15 Clouds 25 Graduated 25 Image 25 Plain 25 Scaled Image 25 That Special Check Box 26					24			
Scanning Negatives or Digital Photography? 15  Clouds Graduated 25  Image 25  Plain 25  Scaled Image 25  Scaled Image 25  That Special Check Box 26						25		
Graduated 25 Image 25 Plain 25 Scaled Image 25 That Special Check Box 26								
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Scanning regatives of Digital I hotograph,	y. 13						
Plain 25 Scaled Image 25 That Special Check Box 26								
Scaled Image 25 That Special Check Box 26								
That Special Check Box 26								
					25	26		
	A Light Way	ke in Arch	iCAD	mat special Check dox		∠0		



			Window Light		46	Light Cone Up and Down		<b>58</b>
			Window Light Dialog		46	The Explorations		59
P 1			Light Intensity (0 to 100)	46		The Relationship of Intensity and Falloff	59	
			Light Color	46		Inner Cone Versus Outer Cone	59	
			Light Quality (0 to 5)	46		Inner Cone Angle	59	
			Shadow Resolution (0 to 5)	46		Measuring Falloff	64	
			Rotation Angle (-90.00 to 90.00)	46		The Light Cone Isn't Infinite	64	
			Cast Shadows	46		Broadening Light Cone Start Size	64	
			Set Sun Position Manually		46	Developing Focus	66	
			Physical Size of Light Array	47				
		26	Light Source Irregularities		47	SpotLight		67
Chapter Two: Light		36	Intensity/Quality	47		1 8		
1			Size/Quality	47		Fluorescent Light at Last!		68
First, the Bad News		36	· •				<b>C</b> 0	00
Then, the Good News		36	Conventional Window Light Applicat	tion	<b>4</b> 7	Adapting the Fixture	68	
Exploration Preview		36	Examples		48	Valance—Downwall Radiance	69 69	
Exploration Fleview		30	Rendering Time Factor Explained	48	10	Adapting the Scene—Mixing Two Colors	09	
G		-	Factors	48				
Composing Sunlight		37	Window Light Basic	49		Wall Light Indirect		70
The <i>LightWorks</i> Lab		37	Medium Quality, Medium Intensity	49		Technical Qualities		70
Exterior Lighting Approaches		37	Medium Quality, Maximum Intensity (C			Power Range	70	
The Three <i>LightWorks</i> Lighting Realn	ns	38	Solution)	49		Color	70	
1. Basic 38			Top Quality, Medium Intensity	49		Inner and Outer Light Cone Radius	70	
2. Normal 38	}		Top Quality, Maximum Intensity	49		Light Starts/Stops	70	
3. Hybrid 38	}		Unconventional Window Light Application		49	Falloff	70	
•			Glowing Room Surfaces	50	I)	Shadow Quality	70	
Exploring Realm One: Basic		38	Tilted Modeling Light	50		Diffuse Light	70	
Light Works Built-in Sun (Basic) 38	1		A Note About Light Color	50	50			
Ambient Light 38			A Note About Light Color		30	Wall Light Upwards		72
Camera Light 39						wan Eight Opwards		, 2
The Explorations		39	Interior Light Source Behavior		51	ATH 1 TZ+. 1 T + 1 .+		- 4
Built-in Sun Alone 39	)	0,	The Test Room		51	Nik's Kitchen Lighting		74
Ambient Light 39			The Explorations and the Discoveries		52			
Built-in Sun with Ambient Light 40			•			Making Decorative Fixtures		76
Zimit in sim min Timotem Zigni 10			Basic Bare Bulb: General Light		<b>52</b>	The Principle		76
Exploring Realm Two: Normal		41		مامداهد ما د		An Uplight	76	, 0
Exploring Realin 1 wos Ivorinar		11	Applying Falloff: Where Light Energy is C Diminish	лансинанеа н 52	.0	A Downlight	77	
Dwight's "Best Guess" Divergence	Sattings	42	Does Adjusting the Light Distance Start/.			A General Light Source	77	
SunObject Angle Divergence at Work	42	42	Change Light Behavior?	<i>Ena vatue</i> 53		Other Lights	77	
What's a Soft Shadow, Anyway?	42			53		Other Factors To Consider		77
GDL SkyObject (LightWorks only)	42		Reducing Basic Light Energy Effect of Wall Proximity			Room Brightness	77	, ,
SunObject and SkyObject Together	43		Wall Proximity for Theatrical Effect	54 54		Wall Value: Dark/Light	77	
Solving a Scene with the SkyObject Al			Reduce Light Number by Half	55		Proximity to Wall Surface	77	
What If?	44		Light Intensity and Perceived Color	55		Example One: Diffusing Glass Light Fixtu		77
Secret SkyObject Sub-Conclusion	44		Modulating a General Light into a Fixtus					
Can a Scrim Overhead Mitigate Sunl			Can the General Light Model Space?	re 55 55		Example Two: Refracting Glass Light Fix	ture	78
Can a sei im Overneua mugate sum	ıgııı. TT		Defining Space with the General Light:	55 55				
Finally Exploring Realm Three: Hy	hrid	45	Defining Space with the General Light:	33		Fakiosity: General Light Radiance		80
I many Exploring Realin Timee: Hy	DIIU	40				List of Things continue	ed next s	spread
						List of Things		E



		The Components	92			101
		1. Color Component	92	<u>Eroded</u>	101	
		Absolute Curvature	92	Plain	101	
100		Blue Marble	92	Plain Coverage	101	
Part I		Chrome	92	Wrapped Checker	101	
		Cubes	92	Wrapped Grid	101	
		Draft Angle Evaluation	92	Wrapped Image	102	
		Gaussian Curvature	92	Wrapped Mask	102	
		Granite	92	Wrapped Square	102	
C1 $C$ $C$	02	Graphisoft Masked Image	93	4. Displacement Component		103
Chapter Three: Surfaces	83	Marble	93	Casting	103	
		Mean Curvature	94	Wrapped Bump Map	103	
#T42 /TL:: -1.42	02	Plain	94	Wrapped Dimple	103	
"It's a Trick!"	83	Simple Wood	94	Wrapped Height Map (no image)	103	
Adapting to Conditions	83	Solid Clouds	94	Wrapped Knurl	103	
Making New Materials	83	Solid Polka	94	(Wrapped) Leather	104	
Our Task	84	Surface Evaluation	94	(Wrapped) Rough	104	
How Things Used to Be	84	Turbulent	94	5. Texture Space Component		104
How Things Changed	84	Wood	95	Graphisoft Replicate	104	
Important Definitions	84	Wrapped Brick	95	ST Layout	104	
LightWorks Archive: .lwa	85	Wrapped Brick Bonds	95	6. Pipeline Component		104
How Things Changed:	85	Wrapped Checker	95	Graphisoft Emission	104	
		Wrapped Diagonal	96	Further Component Qualities		105
Making a Fundamental Decision	86	Wrapped Filtered Image	96	Warning about Material Definition	one	105
		Wrapped Grid	96	Duplicate First, Then Play	105	105
Dissecting the LightWorks Dialog	86	Wrapped Image	96	Take Care When Naming New Material		
Navigating the Basic LightWorks Qualities	86	Wrapped Polka	96	Tune Cure when Isuming Isew Islaterial	3 105	
Component Factors Primer	86	Wrapped Roof Tiles	96	v 1 v 1 . v . 1		
Surprising General Adjustments	86	Wrapped S Stripe	97	Exploring the <i>LightWorks</i> Archiv		105
Scale	86	Wrapped Textured Brick	97	Enabled Features	105	
Specific SurpriseAdjustments	87	Wrapped T Stripe	97	Other Aspects of Using the Archive	106	
The Surface Laboratory (The Light Works I	Lab) 87	Wrapped Wood Floor	97	_		
, ,	,	2. Reflectance Component	97	Making a Rock Wall Texture		107
Reflectance and Environment	88	Chrome 2D	97	1. Take the Photo		107
1. Diffuse Light Reflectance	88	Conductor	98			
2. Specular Light Reflectance	88	Constant	98	2. Disguise Image Edges		107
3. Ambient Light Reflectance	88	Dielectric	98	3. Refine the Material		108
Not 4. Environment Reflectance	88	Environment	98	4. Adjust Light Reflectivity		108
Tweaking Surface Behavior	88	Glass	98	5. Create Relief		108
Tweaking Surface Deliavior	00	Matte	99	6. Tweak the Color		109
G 700 11.		Metal	99			
Component Effects and Masking	90	Mirror	99 99	Texture Mapping		110
Add Feeling and Interact with Light	90	MultiLayer Paint		Determining the Minimum Pixel Sur	nlv	110
Relative Shader Component Strength	90	Phong Shadow Catcher	100	An Example: Calculating Pixels in a Re		110
What's a Mask?	90	Shadow Catcher Translucency	100 100	1. Establish Pixel Size in the Texture Ima		110
An Image	90	Translucency Translucent Plastic	100	2. Establish Rendering Size Output	age 111 111	
A "Channel" within that Image	90	Wrapped Anisotropic	100	2. Establish Kenaering Size Output 3. Analysis	111	
A "Channel" as an Invisible Mask	90	Wrapped Antsotropic Wrapped Circular Anisotropic	101	When You Need the Maximum Pixel St		111
		Wrapped Mirror Map	101	Oak Molding: An Extremely Rig Texture		111
I ! -1.41V/	In the Amelit CAD	** 1 mpp cm 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 mp	101	OAK MOIAINS. AN EXITEMEN DIS TEXTATE	111	

Wrapped Woven Anisotropic

101

LightWorks in ArchiCAD

<b>Perforated Aluminum Texture Mapping</b>	112	1 2			PhotoDream Texture Treatment		160
Establishing the Texture	112				Illustrator's Interpretation		161
Photo Texture or Model?	112	THE RESERVE OF THE PARTY OF THE			Material Characteristics		161
The Texture Image 112		ARREST AND THE PARTY OF			Typical Glass	161	
Establishing Texture Size 112					Typical Stucco	161	
PreLoading Dummy Image Files 113		3			Typical Metal Trim and Balcony Facades	162	
Building the Material 113		2000			Not-So-Typical Foliage	162	
Installing the Texture Map 113					Lighting Strategy		162
Establishing Shader Component Behavior 113					Minor Modulation in <i>Photoshop</i>		163
Esoteric Bump Map Observation 114					-	163	
Flip the Texture Orientation (Bug Fix) 114				104		163	
Back-face Culling 114		Chapter Four: The Tricks		134		164	
					Further <i>PhotoDream</i> Treatment,		165
Shadow Catcher	115	((x,1)   FT + 1 d)		104	PhotoDream Preparation		166
		"It's a Trick!"		134	Combining Effects		171
Making Water	116	What's a Trick?		134			
Making Water		For Lighting	134		Contact Ingortion		170
Water is Not Only a Surface Material	116	For Materials	134		Context Insertion		178
Water's Defining Qualities	116				Preparing a Context Photograph		179
1. Roughness: Water Responds to Energy 116		Profound Trick Concepts		134	Photographic Information for Reflections		182
2. Reflection: Water Responds to Light 117		Think Like a Photographer	134	101			
3. Refraction: Water Conducts Light 117		A Picture is Just a Bunch of Dots	134		The Basic Method		182
4. Transparency: Water Passes Light 117	118	Get Out the Black		135	Preparing the Model		182
					11 0 0 0	182	
Lightworks Archive Water Material: A Perfect		Elyanagant Daigy Chain		136	, ,	183	
Refractive Mirror	118	Fluorescent Daisy Chain		150		183	
Study: Interior Pool Water	119				8 8 9	185	
Study: Activated Distant Ocean Water	120	Make a Glowing Plasma Panel		138	Initial Lighting Solution	185	
Some Important Materials	121	Glowing Neon Tubes		140	The Elaborate Method		188
Stucco	121	The Ordinary Method	140	110	The Photo Editing Approach		188
Concrete	122	The Better Method	141		Some Experiments Good Enough to Use		189
Beveled Stone Tile	124	The Better Memou	111		Merge and Massage		190
Corrugated Metal	125	Candlalight and Countal		149	Processing the Final Product		190
Wood Grain	125 125	Candlelight and Crystal		142			
wood Grani	125				Mirrored Glass Alternatives		192
C1	106	Aerial Imagery—Utility		146			
Glass	126				Multiplying Entourage Quickly		<b>19</b> 4
Modern Glass	127	Emulating Film Grain On a Cloudy	Dov	150	Multiplying Littourage Quickly		175
Improving Glass	128	Linulating Finn Grain On a Cloudy	Day	130			
Clear Glass	128				Glossary		196
Plain Glass	129	A Fly-through Backdrop		152	Bibliography		201
Transparent Glass	129				Index		202
Commercial Glass	129	Interior Light and Materials		156	Muca		402
Two Further Examples	130	interior Light and Materials		130			
A Paperweight Evolves	131						

List of Things 7