

# GLASS PATTERNS

— Q U A R T E R L Y —

Spring 2017

Volume 33 • No. 1

## Glass in the Garden

### Stained Glass

Combining Lead and Foil  
Daffodil Panel  
Lamp Reinforcement

### Fused Glass

Garden Fairies  
Florida Coasters  
Stringer Designs  
Birdbath  
Daisy Bouquet  
Gallery Pendant

### Painting

Designer Eggs



Volume 33 No. 1  
\$6.00 U.S. \$7.50 Canada



www.GlassPatterns.com

**DON'T MISS Our 16-Page Pattern Sheet**

Ideas...

# Amplified



## Blue Ribbon Livin'

2013

14 ft. x 10 ft.

Kiln-formed glass, aluminum and copper  
Washington State Arts Commission  
in partnership with Valley School District



## The Artist

**Michael Dupille** is one of the early pioneers in the kiln formed art glass movement that began in the 1980s. He creates large scale pieces as murals or individual elements using fused crushed glass. He calls his style "Soft Surrealism" due to its representational imagery that incorporates imaginative twists to embellish the narrative. Find out more about Michael and his work at: [www.skutt.com/Dupille](http://www.skutt.com/Dupille)



## The Kiln

*"I love my GM1414! I have used them for years in my workshops, and other studio environments. They are well built, dependable workhorses with some great features. I do a variety of kiln forming techniques as well as production work and the size, depth and versatility of this model allow me to realize nearly all of what I set out to accomplish."*



# SKUTT

**We help you make great things!**

**Publisher** ~ Maureen James

**Editor** ~ Delynn Ellis

**Graphic Artists** ~ Dave Burnett,

Mark Waterbury

**Accounting** ~ Rhonda Sewell

**Circulation Manager** ~ Kathy Gentry

**Copy Editor** ~ Darlene Welch

**Advertising** ~ Maureen James

**Contributing Designers and Writers**

Jean Beaulieu, Denny Berkery

Margot Clark, Delynn Ellis

Marcia Fox, Glass By Appointment Studio

Mary Harris, Arnold Howard

Petra Kaiser, David Kennedy

Ann Madsen, Jim Matthews

Susan McGarry, Kelley Mc Hugh

Chantal Paré, Lisa Vogt

Darlene Welch, Deverie Wood

Nancy Wright-Clapson

**GLASS PATTERNS QUARTERLY**

Issn 1041-6684, is published quarterly

by Glass Patterns Quarterly, Inc.

**POSTMASTER** Send address changes to *Glass Patterns Quarterly*,

8300 Hidden Valley Road,

P.O. Box 69, Westport, KY 40077

**Telephone** 502-222-5631

**Facsimile** 502-222-4527

**E-Mail** info@glasspatterns.com

**Graphic Transfer**

info@glasspatterns.com

**Website** GlassPatterns.com

**Subscriptions** \$24 for one year,

\$43 for two years, and \$61 for three years

Sample issues U.S., \$8 Outside U.S., \$12

Sample issues Airmail, \$14

Kentucky residents, add 6% state sales tax.

Outside the U.S., add \$5 per year

for international postage.

All subscriptions must be paid in U.S. dollars

with an international money order or

with a check drawn on a U.S. bank.

Periodicals Postage Paid

at Westport, KY 40077 and additional

mailing offices. Back issues \$6

plus shipping and handling.

©2017 Glass Patterns Quarterly, Inc.

*Glass Patterns Quarterly* does not stand

sponsorship for opinions or facts of authors. Un-

solicited material will be handled with care, but

the magazine assumes no responsibility for it.

## From the Editor

### Spring Logic

The March Equinox marks the moment when the sun shines directly on the equator and the length of day and night is nearly equal signifying the first day of spring. The March equinox has long been celebrated as a time of rebirth in the Northern Hemisphere. Due to this phenomenon of nature, we start planting metaphoric and botanical seeds, which in turn renews many areas of our life. That is why Glass in the Garden is one of *Glass Patterns Quarterly's* favorite magazine themes. I am proud to serve up a snapshot of what you'll be anticipating with spring, such as decorative eggs, daffodils, and even dandelions plus much, much more.



Be ready to anticipate fresh colors, new textures, and the latest ideas. In the winter season, we tend to be in a protective mode, depending on where we live, and tend to shelter ourselves from the elements and anticipate how the weather will affect our days. Now it's time to rake away the dry leaves and pine needles to see what is ready to sprout. I think you'll be pleased with our collective lineup of stained glass, fused glass, and painted enamels in this issue.

If you plan to attend the Glass Craft and Bead Expo in Las Vegas, stop by our booth during the exhibit portion starting March 31 and ending April 2 at the South Point Hotel and Casino. I really mean that! This is the highlight of the year as far as feedback to the magazine is concerned. We will have issues of *Glass Patterns Quarterly*, *Glass Art*, and *The Flow* magazines, as well as information on Glass Expert Webinars™. You can pick up some back issues, see what's new, and chat for a while. We get to put a face with our subscriber's names and hear real-time comments.

Class registration for the Glass Craft and Bead Expo is open, and classes are filling up quickly. I'm proud to say that I'm also teaching a class, *How to Get Published in the Glass Business* on Thursday evening of the Expo. I hope to present some insider information on publishing your glass projects and patterns and answer your burning questions.

Speaking of burning questions, our contact information has changed, since we no longer have an 800 number. To contact Glass Patterns Quarterly, Glass Art magazine, or The Flow magazine, please call 502.222.5631 or e-mail info@glasspatterns.com, info@glassartmagazine.com, or theflow@theflowmagazine.com. Our office hours are 9:00 a.m. to 5:00 p.m. EST, Monday through Thursday.

Happy Glassing,

*Delynn Ellis*

Delynn Ellis  
Managing Editor



Fused Birdbath  
by Jim Matthews

#### Upcoming Submission Deadlines

**Summer 2017** *Slice of Summer - A Nostalgic Look at Scenes of Summer Past and Present*

Editorial March 20, 2017

Ad Closing April 20, 2017

Ad Materials April 30, 2017

**Fall 2017** *Autumn, Halloween, Christmas, and Holiday Ornaments*

Editorial June 20, 2017

Ad Closing July 20, 2017

Ad Materials July 30, 2017

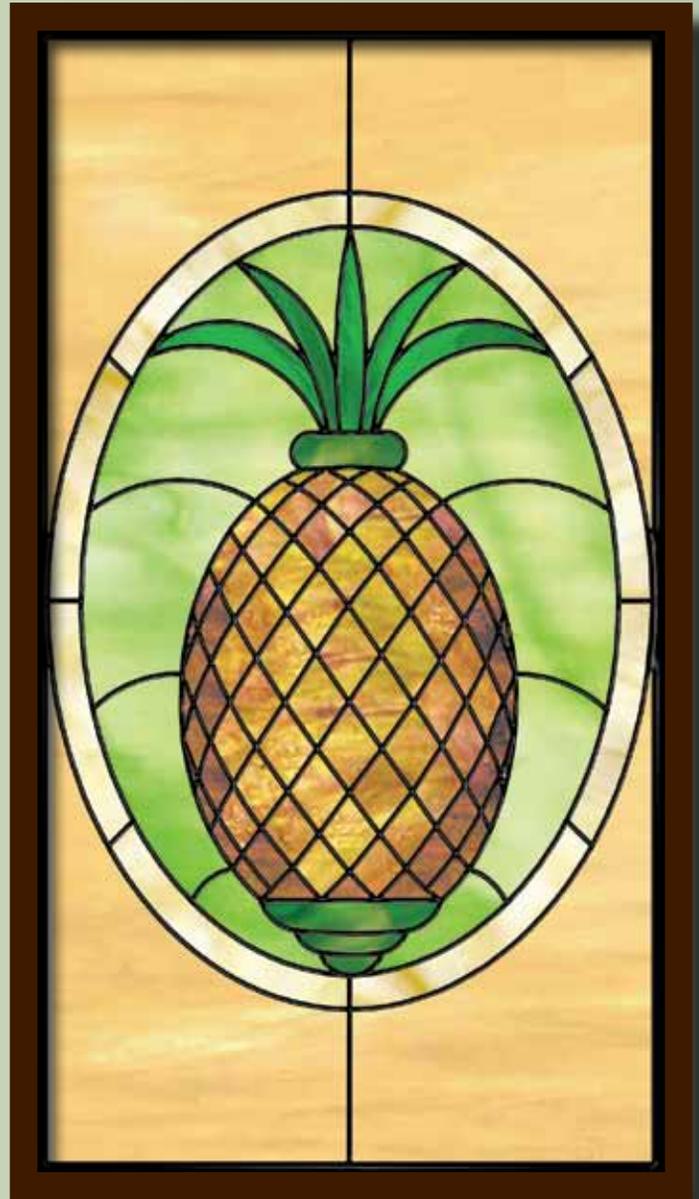
# Glass Patterns Quarterly

## Table of Contents

Spring 2017

Volume 33 Number 1

- 3 From the Editor  
Spring Logic  
*by Delynn Ellis*
- 6 Solitary Trillium  
Combining Foil and Lead Fabrication  
*Design by Chantal Paré*
- 10 Daffodil Panel  
An Introduction to Stained Glass  
*Design by David Kennedy*
- 16 Prairie Design  
*Design by Denny Berkery*
- 18 Egyptian Revival Art Deco Lamp  
*Design by Nancy Wright-Clapson*
- 24 Stylized Pineapple  
*Design by Glass by Appointment Studio*
- 26 Fanciful Garden Fairies  
*Design by Lisa Vogt*
- 30 Daisy Bouquet  
*Design by Kelley Mc Hugh*
- 33–48 16-Page Full-Size Pattern Section
- 49 Beveled Cross  
*Design by Deverie Wood*
- 50 Somebirdy Needs a Bath!  
*Design by Jim Matthews*
- 54 What's New
- 56 Designer Eggs Created with MUD  
*Design by Margot Clark*
- 62 Gallery Pendant  
Two Pendants in One  
*by Susan McGarry*
- 64 Single Rose  
*Design by Jean Beaulieu*
- 66 Florida Coasters and Night-Lights  
Creating Reverse Carving and Drape Molds  
with Kaiser Lee Board  
*Design by Petra Kaiser*
- 69 Ruby-Throated Hummingbird  
*Design by Ann Madsen*
- 70 Designing Dandelions with Stringers  
*Design by Marcia Fox*
- 73 Lake Superior Shoreline  
*Design by Mary Harris*
- 74 Stained Glass Supply Shops
- 77 Kiln Corner  
Kiln Wash Basics  
*by Arnold Howard*
- 78 Advertisers' Index



Active and  
Voting  
Members of



Like us on  Facebook. Also pin us on  Pinterest.

#1 Preferred Soldering Iron for Stained Glass

# HAKKO

# FX-601

## ADJUSTABLE TEMPERATURE CONTROL

The FX-601 is the next generation of temperature adjustable soldering irons. It is ideal for all stained glass soldering applications, from small decorative projects to large windows.

Actual Size



THIS IS NOT A RHEOSTAT

SOPHISTICATED ELECTRONICS  
NOT FOUND IN  
OTHER TEMP CONTROL  
SOLDERING IRONS

- NO RHEOSTAT NEEDED!
- Adjustable "electronic" temperature control
- Dial the variable temperature you want
- Temperature range: 464° to 1004°F
- Ceramic heating element
- Temperature control sensor in heater ensures consistent heat
- Efficient heating = less wattage needed
- FAST thermal recovery
- Lightweight (only 2.4oz without cord)
- Slender, well balanced handpiece
- Durable strain relief
- 3-wire (grounded) power cord
- Extra long 6 ft. power cord
- UL/CSA Approved
- Hakko P/N: FX601-02/P

For full details, tips and accessories, visit [HakkoStainedGlass.com](http://HakkoStainedGlass.com)



# Solitary Trillium

## Combining Foil and Lead Fabrication

*Design, Fabrication, and Text by Chantal Paré*

Thriving in great numbers in the undergrowth of mature maple and hickory forests of North America, the trillium is emblematic of the warm days of the month of May. Every year, their majestic display of lush green leaves and luminous white petals blankets the previous autumn's fallen leaves and is much anticipated by woodland hikers. Waves of trilliums are lit up by patches of sunlight that make their way through the apple green, still expanding leaves of the canopy above. Each bloom nods in the gentle breeze with stately grace.

These flowers are the inspiration for this Victorian-style depiction of a single trillium plant, which emphasizes its striking three-fold symmetry. A variety of Youghioghenny stipple and reproduction glass creates a rich yet subtle watercolor effect that is supported by delicately textured Wissmach seedy and plain clear float glass. A striking pink frame adds cheer to the understated elegance of the trillium.

### Wissmach Glass Company

Seedy-01 Clear Seedy, 3 Sq. Ft.

### Youghioghenny Glass

1007 R, 1 Sq. Ft.

4644 SP, 1 Sq. Ft.

1000 SP, 1/4 Sq. Ft.

3000 SP, 1/4 Sq. Ft.

5002 R, Scrap

### Additional Glass

3 mm Clear Float Glass, 3 Sq. Ft.

6" x 1-1/2" Square Bevels (6)

### Tools and Materials

14-Gauge Pretinned Copper Wire

3/16" or 5/32" Black-Backed Copper Foil

60/40 Solder Flux Flux Brush

Masking or Electrical Tape

3/4" U-Came Zinc

3/16" Flat H-Lead Came

5/32" Round H-Lead Came

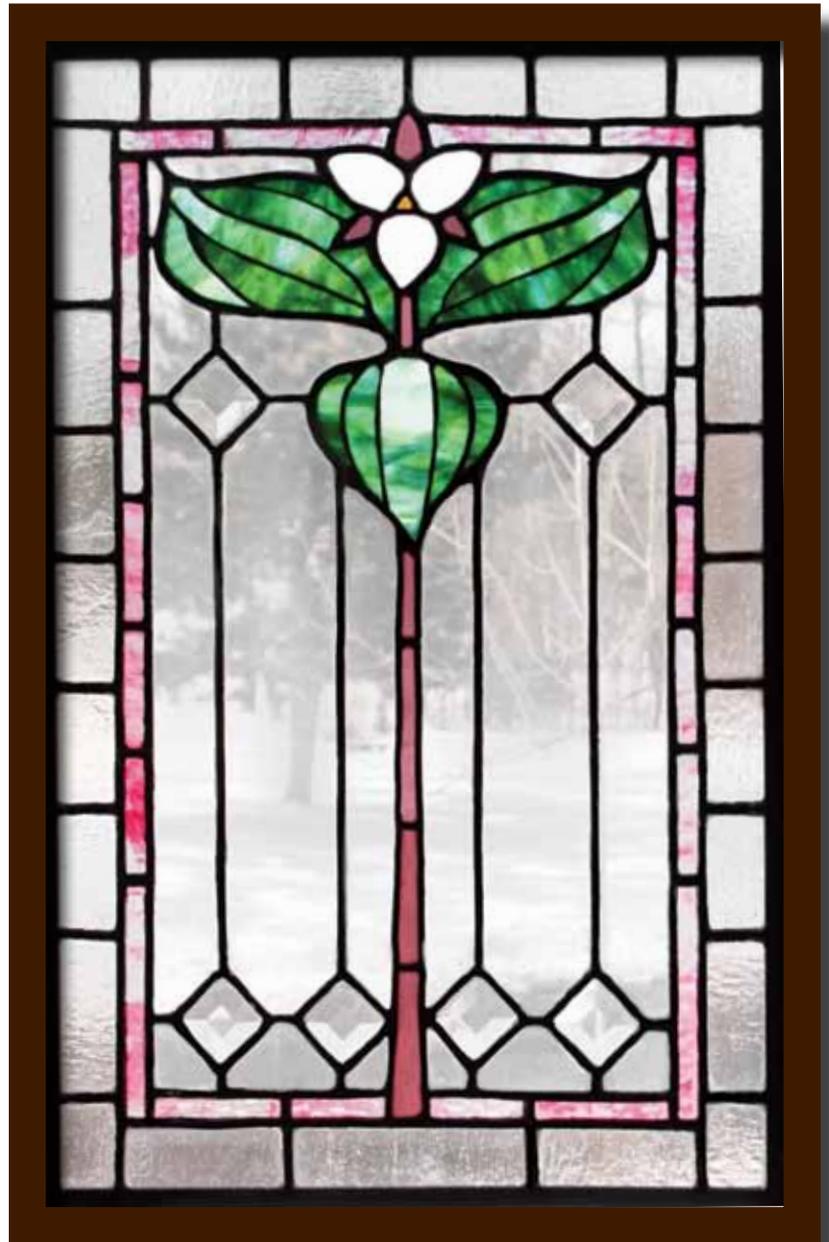
Calcium Carbonate (Whiting)

Horseshoe Nails Burnishing Brush

Lead Knife or Tin Cutter Soft Mallet

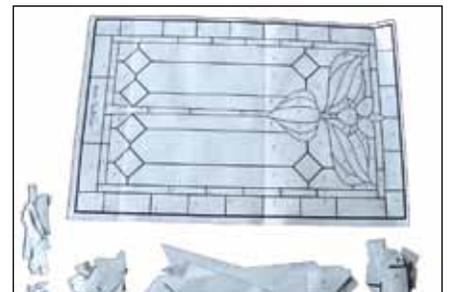
14-Gauge Pretinned Copper Wire

Carpenter's Square



1

*Make two copies of the template and cut out all the individual pieces of one template inside the black lines.*

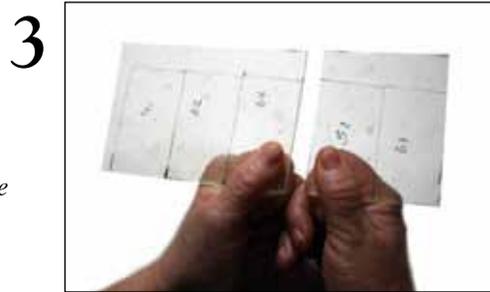


Use ordinary or pattern shears for this task.

Trace each paper piece onto the glass on the smooth side where the sides are not even.



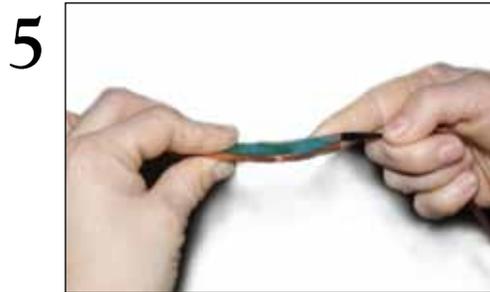
Score and break the glass, keeping the glass cutting wheel inside the marker lines.



Grind the green glass and check for a good fit with the paper template.



Wrap the edges of the green glass only with the black-backed copper foil.

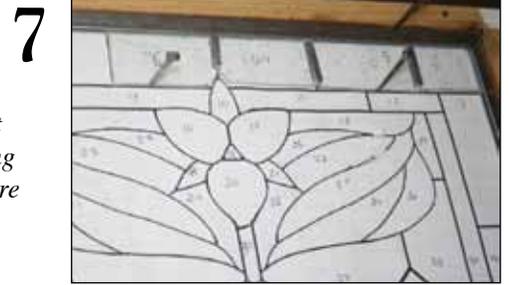


Burnish the edges with a fid or the blunt side of scissors. I am using 5/32" foil because I want fine lead lines, but the more common 3/16" foil can also be used.

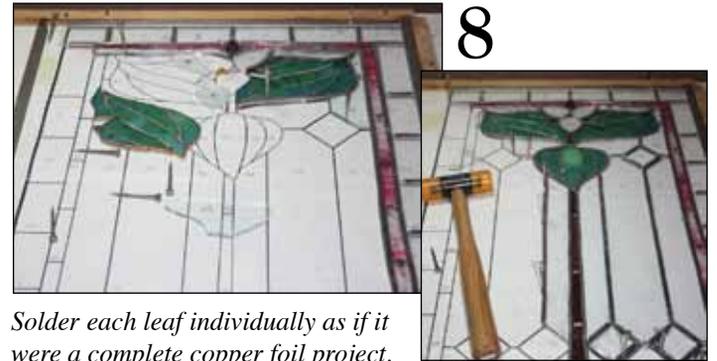
Solder each leaf individually without beading all the way to the leaves' outer edges in order to allow room for the came.



Prepare a 2-sided jig to contain the project as you lead it, using a carpenter's square to ensure perfect corner angles.



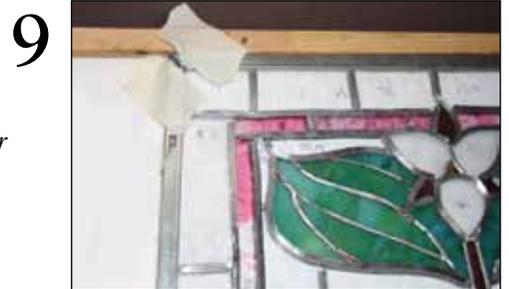
Cut out a frame from the 3/4" U-came zinc with a miter saw. Cut and place the glass pieces and the lead segments, securing their placement with horseshoe nails. Gently tap the glass into place using a soft mallet, working your way from top to bottom and from left to right.



Solder each leaf individually as if it were a complete copper foil project, without worrying about the outer edges.

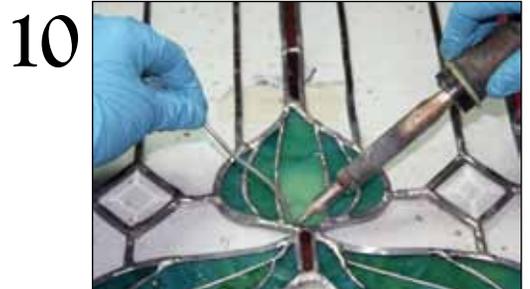
Each of the three leaves now becomes like a single glass piece that you insert into the lead as if it were any ordinary single piece of glass. Insert the presoldered copper foil leaves into the lead came.

Mask the areas around each solder joint on the zinc framework, then solder.



Remember that zinc takes a bit more flux and heat than lead. When that's done, lightly tack-solder each lead line to the zinc framework where both touch.

Solder the piece, front and back.



# An Awesome Art Glass Experience

## GLASS QUEST 2017

Guiding Art Glass Into Tomorrow... and Beyond

**JOIN THE QUEST:** A full weekend of education and engagement. Learn from brilliant teachers and glass visionaries and network in the evolving world of art glass

**GLASSQUEST DATES:** May 26th, 27th & 28th 2017 in beautiful downtown West Palm Beach, Florida.

For more details about the event and to register go to:

[www.Glassquest2017.eventbrite.com](http://www.Glassquest2017.eventbrite.com)



Lisa Vogt



Leslie Perlis



Phil Materio



Peter McGrain



Tony Glander



Jen Ken Kilns

**KEYNOTE SPEAKER:** Maureen James - Art Glass Educator and Publisher will review her unique understanding of today's issues and offer some exciting future possibilities.

**SPEAKER PRESENTATIONS:** Multi-media talks designed to inform and promote the spread of great ideas from leading art glass thinkers and innovators such as: Peter McGrain, Lisa Vogt, Leslie Perlis, Tony Glander, Phil Materio and Randy Wardell. The positive enthusiasm driving these dynamic presenters is contagious.

**GALLERY EXHIBITIONS:** Our presenters will have their work in our gallery and will be available for you to meet, talk, and pick the brains of these prolific idea-generators.

**ROUNDTABLE DIALOGUE:** Participate in a 'round-the-table' moderated discussion of art glass as an art form, a craft, a business and a culture, to discover ways to adapt, and adopt to the changing needs of the times.

**MANUFACTURERS:** We will have some of the industry's most innovative manufacturers on hand to demonstrate, show you what they're working on, answer any questions and enable you to make purchases.

**VIP COCKTAIL RECEPTION:** A private tour and cocktail reception hosted at Habatat Galleries of contemporary glass. Get up close and personal with some of the most remarkable state-of-the-art glass creations available anywhere.

**CANE PULLING EXPERIENCE:** Sunday morning breakfast, hosted by Jen Ken Kilns. With multiple Vitragraph kilns enabling each participant to pull twisted cane to take home.

Glass Quest 2017 is Produced by:

**WARDELLPRODUCTS**.com  
Books, eBooks, Molds & Workshops for the Art Glass Community

**MCMOW**  
ARTGLASS

Solder the joints on the first side of the project. Apply flux to each joint in a small area with a brush and cover with 60/40 solder. Gently turn the project over lengthwise, making sure not to apply torsional forces that could crack the glass, and solder the second side.

### 11

*Make hooks by folding over the pretinned 14-gauge copper wire and solder into the two upper corners.*



### 12

*Squeeze putty under the came on both sides of the project with a putty knife or your gloved hands.*



### 13

*Give the panel a final cleaning with whiting and a burnishing brush, followed by a domestic window cleaner.*



Throw a fistful of whiting on the puttied window and brush vigorously with a burnishing brush, along and against the lead lines. Move the brush in a circular motion until the zinc shines and the lead turns dark gray. Wash, scrape off any excess putty, and clean again.

**GPO**

*A decade ago, Chantal Paré quit the fast-paced world of molecular biology to devote herself to the full-time pursuit of glass. She's liable to melt it, blow it, break it, paint it, or cast it, sometimes just to show it who's boss. Nothing else comes close to creating an object through which light can pass the same way it does through water. In her free time, Chantal draws patterns in a variety of styles ranging from Victorian to geometric and self-publishes them on the Internet. Lately, she's concentrating her efforts on glass painting.*



Register here: [www.Glassquest2017.eventbrite.com](http://www.Glassquest2017.eventbrite.com)  
or call: 561-585-9011 or 954-557-5589

© Copyright 2017 by Glass Patterns Quarterly.  
All rights reserved.

# NEW! CABOCHON SNAP & SWITCH



Make your jewelry fit your mood with SNAP & SWITCH! Personalize each day's accessories by the day, minute or hour. Attach the connector to the back of your glass pieces with adhesive, the pop them in and out to suit your mood anytime of the day or night. Modular jewelry for everyone!!

## Necklaces

AANP-01

AANP-02

AANP-13



## Bracelets

AANP-08

AANP-09

## Ring

AANP-10

AANP-14

## Pendant (without chain)

AANP-11

## Earrings

AANP-12

## Extra Disks

AANP-03  
5 pc./pack

## WINE BOTTLE STOPPERS PURSE HANGERS NEW! EARRING HOOPS



- ITEM# NICKEL PLATED**  
 A. SMT Short Mandrel  
 B. RMT Round Top  
 C. FMT Flat Top  
**ITEM# STAINLESS STEEL**  
 A. SMT-SS Short Mandrel  
 B. RMT-SS Round Top  
 C. FMT-SS Flat Top



- A. FPH Flat Top  
 B. RPH Round Top

## KEY HOLDERS

- A. KH Original  
 B. RKH Round  
 C. FKH Flat



AANP-05  
24 pc./pack

## DISPLAY STAND for Glass Beads



SPBSB  
1.5"W x 3"H

## TWOFERS™ Grinder Bits 2 for the price of ONE

- |           |                      |       |                      |
|-----------|----------------------|-------|----------------------|
| GB10SB60  | 1" Coarse 60         | GB14R | 1/4" Regular 100/120 |
| GB10R100  | 1" Regular 100/120   | GB18R | 1/8" Regular 100/120 |
| GB10M170  | 1" Medium 170        | GB38R | 3/8" Regular 100/120 |
| GB10F220  | 1" Fine 220          | GBJB  | Jewelry Bits         |
| GB10UF600 | 1" Ultra Fine 600    | GBRB  | Ripple Bits          |
| GB34SB60  | 3/4" Coarse 60       | DB18  | 1/8" Core Bits       |
| GB34R100  | 3/4" Regular 100/120 |       |                      |
| GB34M170  | 3/4" Medium 170      |       |                      |
| GB34F220  | 3/4" Fine 220        |       |                      |
| GB34UF600 | 3/4" Ultra Fine 600  |       |                      |



## TEA SERVER

- TTT2 Tea Server  
 TTT1 Extension Kit



## SQUARE BOXES

- In Medium Cherry finish  
 SQBL 9.5" Sq., Glass Size 6"  
 SQBM 7.5" Sq., Glass Size 6"  
 SQBS 5.5" Sq., Glass Size 3 1/4"

## BOOKMARKS

- A. FBM Flat Top  
 B. RBM Round Top

## AANRAKU® GENUINE JEWELRY BAILS

### Leaf Bails



- ITEM# NICKEL PLATED**  
 NJBS Large  
 NJBL Small  
**ITEM# SILVER PLATED**  
 SJBL Large  
 SJBM Medium  
 SJBS Small

### Heart Bails



- ITEM# GOLD PLATED**  
 GJBL Large  
 GJBM Medium  
 GJBS Small  
**ITEM# .925 SILVER**  
 925L Large  
 925M Medium  
 925S Small

### Earring Bails



- LEAF EARRING BAILS**  
 ITEM# DESCRIPTION  
 SEBS SILVER PLATED  
 GEBS GOLD PLATED  
**HEART EARRING BAILS**  
 ITEM# DESCRIPTION  
 SHBS SILVER PLATED  
 GHBS GOLD PLATED

### Pattern Bails



- ITEM# SILVER PLATED**  
 A. SPBL-H Hexagon  
 B. SPBL-H Hashmark  
 C. SPBL-L Leaves  
 D. SPBL-T Tortoise  
 E. SPBL-W Waves  
 SPBL-A Assorted (5 in 1)

### New Design Bails



- ITEM# SILVER PLATED**  
 A. SFBS Fish  
 B. SCBS Celtic  
 C. SPBS Paw

## GRINDER'S MATE

Makes glass grinding a pleasure instead of a chore. Say goodbye to sore and painful fingers FOREVER!

NGM



## FRIT MAKER

FM1



## FRIT SIFTERS



## LEATHER CORDS

- Available in 3 Sizes  
 LC16 16"  
 LC18 18"  
 LC20 20"  
 With 2" extender chain



Ask for them at your local supplier

41 S. Railroad Ave. San Mateo CA 94401-3209 Tel. (650) 372-0527 Fax. (650) 372-0566 www.abasg.com

\*Aanraku®, its logomark and ® are registered trademarks of Aanraku Glass Studios. All rights reserved.

# Daffodil Panel

## An Introduction to Stained Glass

*Design, Fabrication, and Text by David Kennedy*



*"I wandered lonely as a cloud  
That floats on high o'er vales and hills,  
When all at once I saw a crowd,  
A host, of golden daffodils."      Henry Wordsworth*

The excerpt above was taken from one of the most famous works by poet Henry Wordsworth, *I Wandered Lonely as a Cloud*. It was inspired by a group of daffodils that he stumbled upon during a walk with his sister in the early 1800s.

While this must have been a stunning but short-lived sight, you can recreate the beauty of the delicate daffodil permanently in glass. The lovely round display can be placed on a stand as shown here, or you can add chain for hanging in a window. Either way, the cheery colors of yellow and green are sure to make your day.

### Uroboros Glass Studio

00-78 Light Green/Spring Green  
for Border and Flower Stems, 1/2 Sq. Ft.  
60-74 Emerald/Spring/Yellow/Green/White  
for Foreground Leaves, 1/2 Sq. Ft.  
60-77 Forest Green/Chartreuse  
for Background Leaves, 1/2 Sq. Ft.  
60-165 Greens/Browns/Yellow  
for Flower Buds, Scrap  
00-361 Amber/Lemon Yellow/White  
for Flowers and Flower Centers, 1/2 Sq. Ft.

### Youghioghny Glass

1431-SP Ice White/Lime/Emerald Green  
for Background, 2 Sq. Ft.

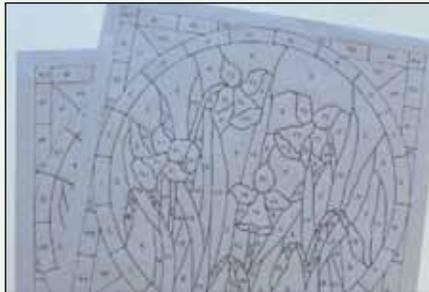
### Tools and Materials

7/32" Copper Foil Burnishing Tool  
50/50 Solder 60/40 Solder  
4 x 4 C- or U-Channel Lead Came  
3/4" Grinding Bit Water Soluble Flux  
Band Saw Permanent Marker Pen  
Firelite Forms 15"-Diameter Metal Stand  
Small Paintbrush Stiff Brush  
Dish Detergent Black Patina

Photography by Sharon Kennedy

1

Make two copies of the pattern, one for cutting out the pieces and one for using as a template.



2

Prepare a 15"-diameter round jig for building the panel.



I am using the jig, because I want to place the finished panel in a metal table stand.

3

Using the Uroboros 00-78, cut a section of three border pieces as a pattern, then cut 7 of the three-piece sections.



There will be 20 border pieces altogether

4

Cut the individual border pieces from each section and fit them on the template pattern.



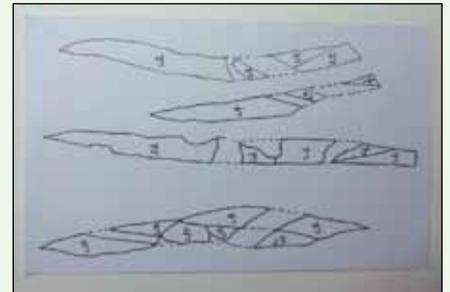
5

When the border is complete, add the leaves in the foreground using the Uroboros 60-74.



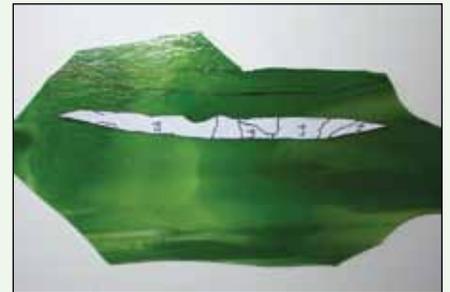
6

Before cutting the background leaves, make a separate pattern to ensure continuity of the glass pieces.



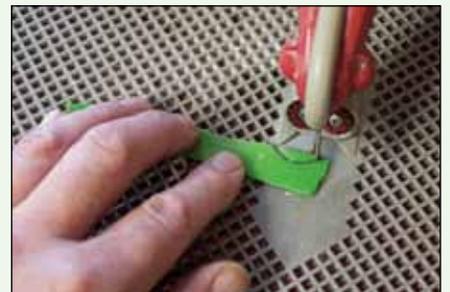
7

Cut the background leaves from the Uroboros 60-77, making the L10 pattern piece the darkest one.



8

Use a band saw to cut out the tricky inside curves.



9

Once all of the leaves are cut, add the flower buds F8, F6, F5, and F7 with the Uroboros 60-165.



14

Burnish the foil.



At the same time, add the flower stems using the Uroboros 00-78.

Make sure the foil is burnished onto the glass well. I find that a putty knife is excellent for this purpose.

10

Add the flowers and flower centers with the Uroboros 00-36, picking out the ring mottles for maximum effect.



15

When all of the border pieces are foiled, start on the inner pieces, again making adjustments as necessary.



11

Transfer the pattern onto the glass for the background pieces with a permanent marker.



16

When all of the pieces have been foiled, apply flux to the seams and solder them flat using 50/50 solder.



Try to keep the darker shades in the glass toward the base of the panel. Once the pieces are marked, cut the glass using a band saw.

Remove the panel from the jig and repeat the fluxing and soldering process on the reverse side.

12

As you cut and place the background glass pieces, add the remaining flower petals as well.



17

Frame the panel with C- or U-channel lead.



The panel will now start to come to life.

Stretch a length of 4 x 4 C- or U-channel lead came and cut a length approximately 4 feet for a 15"-diameter panel. This can now be eased around the edges to provide a nice, neat finish.

13

Once all the pieces are cut, begin to foil the glass.



18

Complete the soldering, reapply flux to the seams, and bead-solder the panel using 60/40 on both sides of the panel.



It's best to always start foiling the border on a panel like this one. There is no need to foil the outside edge, since the lead came will cover it. Remove the pieces from the template to apply the foil and replace them one piece at a time. Make any needed adjustments as you proceed.



#### CS-5630 Dimensions

- Exterior with top closed: 70 1/2" W x 53" D x 52" H
- Exterior with top raised: 70 1/2" W x 63" D x 76" H
- Interior: 56" x 30" x 17" (15 1/2" deep when measuring from quartz tube surface)
- Flat load floor, 30" from ground level

# Introducing the Paragon CS-5630 clamshell kiln with quartz tubes

#### Deluxe quartz tubes

Imagine the huge glass pieces you could make inside the new Paragon CS-5630. Enjoy complete access to your artwork from the sides and front. Add delicate stringers or frit without having to move the shelf into the kiln later.

The roof elements are protected in 10 quartz tubes for a cleaner kiln interior. There is less dust in the kiln, because there are no element grooves in the top.

#### Heat from the top, walls, and floor

The CS-5630 is 56" x 30" x 17" high. With elements in the floor, walls, and roof, you will enjoy unsurpassed heat distribution. The digital controller uses Power Ratio technology to vary the heat output between the top and bottom elements.

#### Extra insulation and woven gasket

Lift the kiln top section with handles in the front and sides and with assistance from gas springs. The roof is 3" thick ceramic fiber, and the walls are 3" firebrick backed by 1" of ceramic fiber board (4" of total wall thickness). The extra insulation helps to maintain even temperatures. A woven gasket between the kiln top and floor helps to hold in the heat. The floor

surface is a convenient 30" high from ground level. The 4 1/2" thick firebrick floor includes two expansion joints.

Watch the glass through 2" x 3" peep-holes mounted in the left and right sides. The kiln includes locking casters.

#### Motorized vent for firing molds

If you fire molds, you will welcome the motorized Orton Vent Master, which is mounted in the back wall of the kiln. The vent, mounted on rubber isolators to prevent vibration, removes moisture from the kiln to reduce rust. The vent is standard on the CS-5630 and plugs into an auxiliary output in the back of the kiln. This allows you to turn on the vent through the digital controller.

#### Low maintenance

Deluxe, long-lasting mercury relays are standard. Gain convenient access to the electrical components by removing a single panel. The kiln includes access panels for replacing quartz tubes.

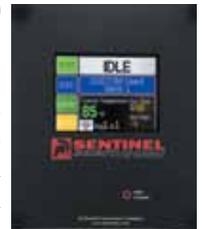
#### Rugged

The CS-5630 is the very picture of ruggedness. A ledge in front of the kiln protects the brick floor from damage caused by leaning into the kiln. The digital controller is mounted away from the

heat for long life. The kiln base is welded from 2" x 2" steel tubing; the upper kiln frame is welded from 1" x 1" steel tubing.

#### Optional touch screen controller

Order your CS-5630 with the optional Sentinel Smart Touch controller. The Sentinel can check the voltage and amperage and can be programmed with easy-to-follow screen descriptions.



For more details, please visit our website or call 800-876-4328. We look forward to hearing from you.

**Constantly finding ways to make better kilns.**

**Paragon Industries, L. P.**  
 2011 South Town East Blvd.  
 Mesquite, Texas 75149-1122  
 800-876-4328 / 972-288-7557  
 www.paragonweb.com  
 info@paragonweb.com

Better  
Designed  
Kilns™

19  
Once all the soldering is complete, clean the panel using a tiny amount of dish detergent and warm water.



A stiff brush will help to remove all of the flux and solder residues.

20  
Use a small paintbrush to apply patina to the seams.



Let the patina dry for a couple of hours before giving the panel a final cleaning.

**GPO**

© Copyright 2017 by Glass Patterns Quarterly.  
All rights reserved.



David Kennedy began his stained glass journey in 1984. After mastering the basics, he moved on to art glass, which has now become his passion. The artist doesn't use plating or painting techniques, preferring instead to take his inspiration from the glass itself.



David is now in the process of publishing his original designs on Etsy.com with the help of his wife Sharon. They live on the Hook Peninsula, located in a rural historic southeastern section of Ireland, where he produces panels and designs in his own unique style.

*Anything In Stained Glass*  
Since 1979

Family Owned,  
Exceptional Prices,  
Friendly Staff,  
& Quick Shipping!

(800) 462-1209      [www.anythinginstainedglass.com](http://www.anythinginstainedglass.com)      Frederick, MD

**Over 9,000 ft<sup>2</sup> of Glass/Supplies**

Collect All 24 CD's  
Now over 2200 Patterns



All patterns in .JPG, TIF,  
& .EYE Formats  
www.panedexpressions.com  
Visit our site for individual  
downloadable patterns!

San Diego artist and author Leslie Perlis combines fused glass and mosaic in her life-size art. Her glass cutter is a **Toyo Custom Grip Supercutter®** with **Tap-Wheel®** technology.

For more information, visit:  
glassaccessories.com



**VISIT BOOTH  
#727 AT THE GLASS  
CRAFT & BEAD EXPO!**

**Glastar**  
Products of Quality Since 1978

**Made in the USA. The Brand You Trust.**

GREAT TOOLS, PRODUCT EXPERTISE & CUSTOMER SERVICE YOU CAN ALWAYS COUNT ON.



**Bead Reamer**

**Jewelry Head**



**SPRING SPECIAL**

\*Free EZ-Grind™ Coolant 1 oz. and a Molded Eye Shield from March - April with a Diamond Star™ grinder purchase.  
Call us or your local dealer to request for catalogs and more info.

**FREE!\***



**Heads**

**Specialty Heads**

Glastar Corporation • glastar.com  
8425 Canoga Ave Canoga Park, CA 91304

(800)423-5635 • Tel (818)341-0301  
F(818)998-2078 • GPQ@glastar.com

# Prairie Design

Design by Denny Berkery, Text by Delynn Ellis

Prairie designs, which were made popular by American architect, interior designer, and educator Frank Lloyd Wright, are usually expressed in rectangles, squares, and straight lines. He once said, "The nature of the glass is taken into account in prairie designs. Most of them are treated as metal 'grilles' with inserted glass forming a simple rhythmic arrangement of straight lines and squares made as cunning as possible so long as the result is quiet."

Denny Berkery has drawn upon his many years of experience as a stained glass artisan to create a series of custom designs that will fill a cabinet door or suit to fit a similar sized window. This 12" x 24" panel comes from his book, *300 Stained Glass Cabinet Door Designs*. You will find patterns from contemporary to historic in his book. This geometric design captures the essences of the prairie-mission-arts & crafts style. You can see more of Denny's work at [www.vineryglass.com](http://www.vineryglass.com). **GPO**

## Wissmach Glass Company

44-L Burgandy/Crystal Rough Rolled  
for Inner Border Accents, Scrap

145-G-SP Dark Amber/Opal/Crystal  
for Inner Border, 2 Sq. Ft.

55-L Amber/Green/Opal/Crystal  
for Design Center, 2 Sq. Ft.

155-LL Dark Purple/Green/Light Opal/Crystal  
for Outer Border, 2 Sq. Ft.

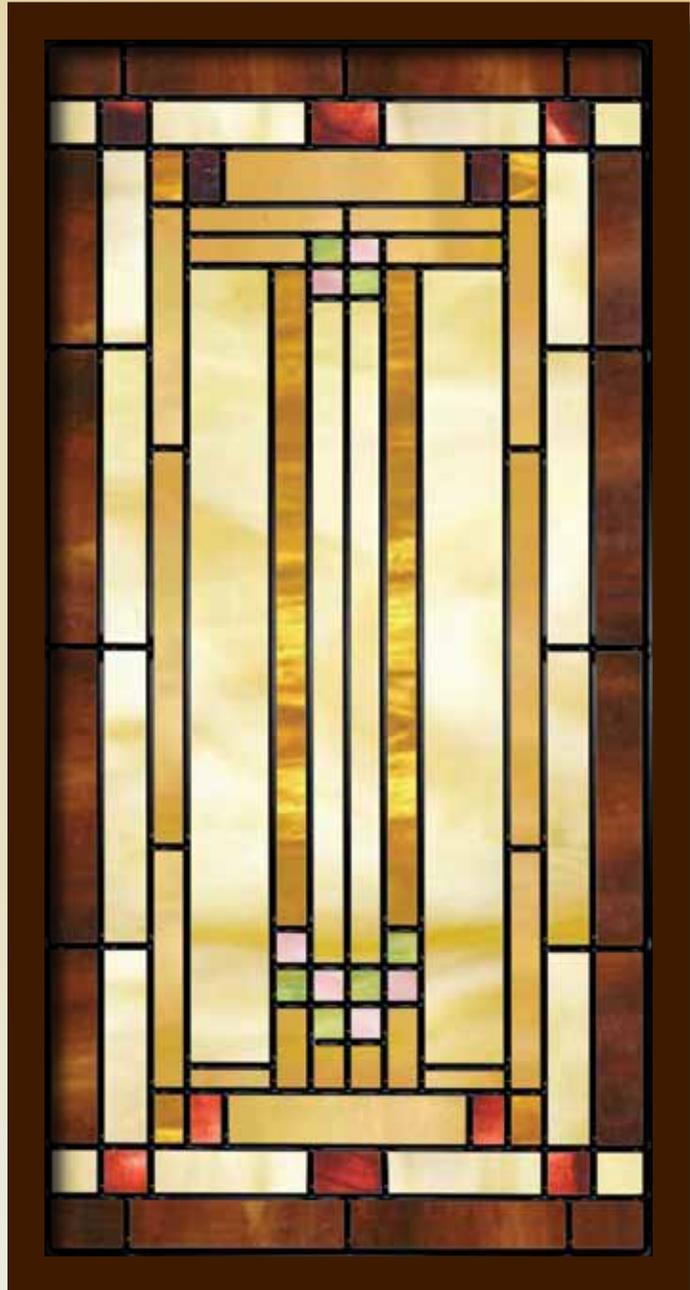
325-D Light Amber/Opal/Crystal  
for Background, 2 Sq. Ft.

140-D Medium Purple/Opal/Crystal  
for Center Accents, Scrap

78-L Medium Amber/Green/Opal/Crystal  
for Center Accents, Scrap

## Tools and Materials

7/32" Copper Foil Flux Solder  
Black Patina 1/2" U-Channel Lead



© Copyright 2017  
by Glass Patterns Quarterly.  
All rights reserved.



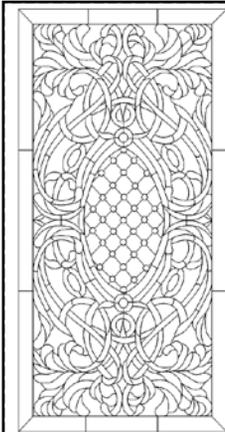
Ana-Maria Nava

KNOWLEDGE  
IS  
POWER

CREATIVITY  
IS  
FREEDOM



**His Glassworks, Inc.**  
2000 Riverside Drive, Suite 19  
Asheville, NC 28804 USA  
p 828 254 2559  
tf 800 914 7463  
www.hisglassworks.com



## In a Pattern Daze?

*Custom Pattern Design Service  
For Studio & Hobbyist*

- Have a Photo or Idea and want to try it in stained glass, fuse, or etch?
- Need a pattern resized or reshaped?  
Have a client who needs a special window design?  
Let us be your art department!
- All patterns printed full-size, cut & layout copies,  
color coded, and piece numbered.  
Glass recipe & color print provided

Phone: (410)-676-1248

Paned Expressions Studios  
Over 35 Years Design Experience

FAX: (410)-676-2112

Visit: [www.panedexpressions.com](http://www.panedexpressions.com)

E-mail: [SGPatterns@panedexpressions.com](mailto:SGPatterns@panedexpressions.com)

Quality  
Products.

In Stock.

Shipped  
Fast.

Franklin Art Glass Studios Inc.

222 E. Sycamore St.  
Columbus, OH. 43206  
800-848-7683

[www.franklinartglass.com](http://www.franklinartglass.com)

## Introducing the new TAP Controller

featuring  
touchscreen technology

- TOUCHSCREEN
- WI-FI ENABLED APP\*
- GRAPHICAL  
FIRING VIEW
- PRE-LOADED  
FIRING SCHEDULES
- SOFTWARE UPDATES

**evenheat**  
Better by Design.™

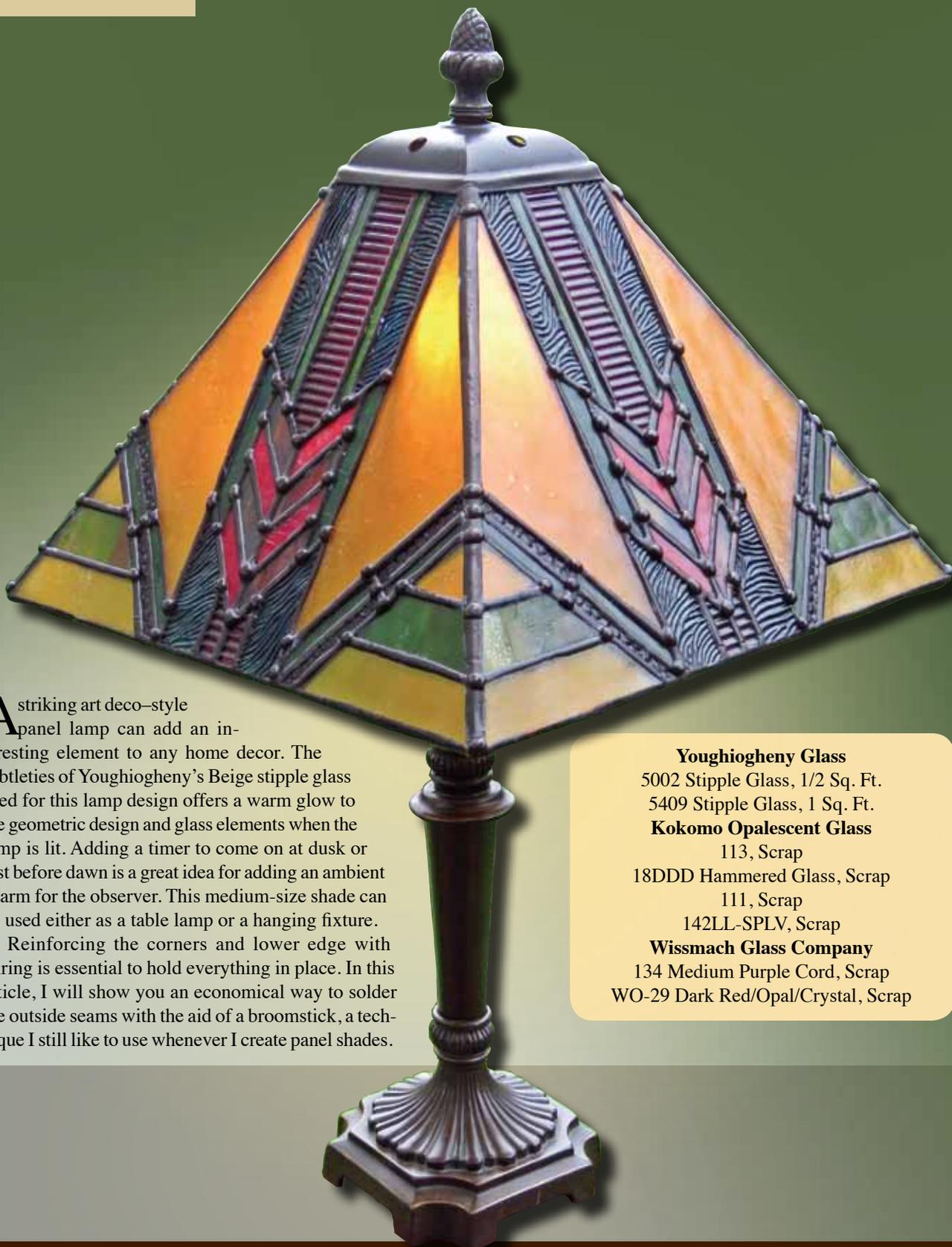
[www.evenheat-kiln.com](http://www.evenheat-kiln.com)



\*Wi-Fi  
expected December 2015

# Egyptian Revival Art Deco Lamp

*Design, Fabrication, and Text by Nancy Wright-Clapson*



A striking art deco-style panel lamp can add an interesting element to any home decor. The subtleties of Youghioghenny's Beige stipple glass used for this lamp design offers a warm glow to the geometric design and glass elements when the lamp is lit. Adding a timer to come on at dusk or just before dawn is a great idea for adding an ambient charm for the observer. This medium-size shade can be used either as a table lamp or a hanging fixture.

Reinforcing the corners and lower edge with wiring is essential to hold everything in place. In this article, I will show you an economical way to solder the outside seams with the aid of a broomstick, a technique I still like to use whenever I create panel shades.

## **Youghioghenny Glass**

5002 Stipple Glass, 1/2 Sq. Ft.

5409 Stipple Glass, 1 Sq. Ft.

## **Kokomo Opalescent Glass**

113, Scrap

18DDD Hammered Glass, Scrap

111, Scrap

142LL-SPLV, Scrap

## **Wissmach Glass Company**

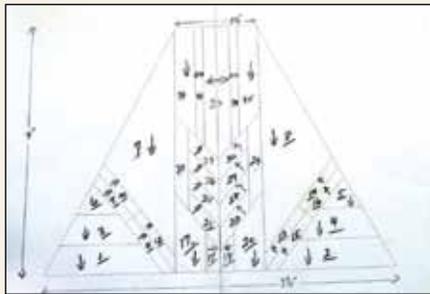
134 Medium Purple Cord, Scrap

WO-29 Dark Red/Opal/Crystal, Scrap

### Tools And Materials

Printer Paper Card Stock Transparent Tape  
 White and Black Marking Pens X-Acto Knife®  
 Grozer, Running, and Needle Nose Pliers  
 60/40 Solder Flux 7/32" Copper Foil  
 18-Gauge Wire Wire Cutters Black Patina  
 Acetone or Other Paint Remover  
 16" x 16" Homosote Board 16 Metal Pushpins  
 Layout Strips 12" (1), 6" (4), and 3" (1)  
 Newspaper 2' Steel Square 2 Foam Wedgies  
 2-3/4" Square Vase Cap 7" Harp Finial  
 9" Lamp Base Small Level 25-Watt Light Bulb  
 Long-Handled Broomstick Round Container  
 Dawn Dish Soap White Scrubby Sponge  
 Glass Wax Soft Polishing Towel Cotton Swabs  
 Glass Eye 2000 (optional) Lamp Leveler (optional)

1

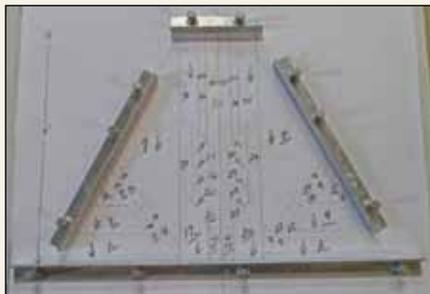


Plan the design.

You can use the Glass Eye 2000 program to make this model, or create a design of your own using the measurements shown in the photo. The most important measurement is at the top where the vase cap fits on. Make sure that it measures no more than 2-3/8" in width.

If you create your own design, you can adjust the height and lower width of the shade to suit your project. The general ratio rule for fitting a lamp shade to a base is 3:1, with the height of the shade being 1/3 of the total height of the lamp. The remaining two-thirds would be for the exposed height of the base. For this tutorial, I made the height of the shade 7" and the lower width of one panel 9-3/4" across.

2



Set up the metal layout strips on the pattern to help with assembling the pieces for the panels.

Once you've added the pattern numbers and directional arrows for the glass placement onto the cartoon, lay a double layer of newsprint on a 16" x 16" section of homosote board. A large ceiling tile or gyp rock with the edges taped can also function as a working base substitute.

Place the cartoon on top of the newsprint and add the metal layout strips around the perimeter of the design. Make sure that the pushpins are flat against the metal strips to prevent any movement. Leave the layout strips in place until you have all four panels completed. This will ensure all of the panels will be the same size.

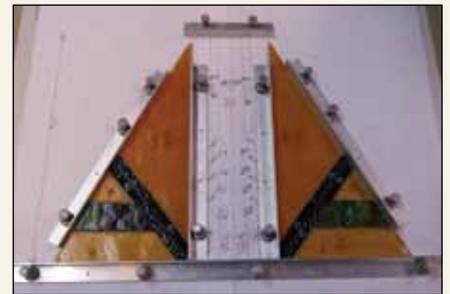
3



Number, cut, and foil the glass pieces for all four panels.

You can use a light table to check the glass color selections and grain before foiling.

4



Assemble the foiled glass pieces for each of the four panels.

Begin by fitting the two outer sections of the panel. Use a 6" layout strip to help line up the edges to make each side section the same size. Once all of the sections are done, remove the two center 6" layout strips and proceed to fit in the glass pieces for the center section of each panel. Foil and tack-solder the panel seams before removing them from the layout strip jig.

5



Review the panels before assembly, checking to make sure that each panel is the same length and the connecting lines match at the corners.

Flux and solder the seams for all four panels, front and back. Lightly tin the foiled outer edges of each side as well as the upper and lower foil edges, front and back. Remove the white and black numbers from the glass with acetone or other paint remover such as Goo-Gone or Goof-Off.

6

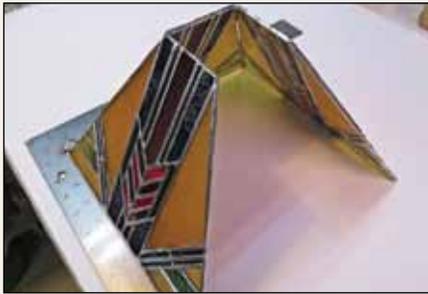
*Tack-solder the first two panels.*



Place two of the panels up against a steel square with the inside edge of the panel corners touching. Lightly tack-solder the two panels at the top end, the seam connections, and bottom corner. You can work from your homosote board and use a few pushpins to hold the square in place as you work.

7

*Tack-solder the two remaining panels.*



Place the third panel against the second panel side, with the inside edges touching, and lightly tack-solder the corner seam. Add the fourth panel, aligning the first and third sides to it. Electrical tape can be used to hold the panels in place, but I haven't found the need to do that when I use this steel square technique. You can leave the attached panels with the square in place to add the wires.

8

*Apply the 18-gauge wire into the four corners of the shade.*



Make a small 1/2" right-angle bend with the 18-gauge wire, having it rest flat on the upper edge of the panel, and tack-solder into place. Continue to tack-solder the wire down the full length of the outside corner groove to the bottom of the shade, then cut the wire when you reach the end of the seam. Do the same for the next two corners.

For the fourth corner, once you've tack-soldered down the full length of the shade, do not cut to length. Instead, leave the wire long enough to continue around the total bottom edge of the shade. Overlap the wire 1/2" around the last corner and cut.

9

*Square up the shade panels.*

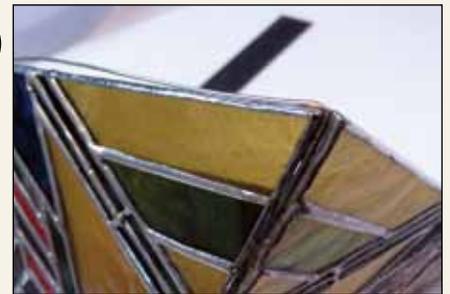


Using a round shape will actually square up a panel shade. This is a good way to true up a paneled shade, no matter how many sides it has.

Place the shade inside a round container that is at least 6" in diameter with the bottom end of the shade facing up. Make sure that all four of the outside corners are touching the edge of the container. You can set your work at a more comfortable height by placing the container on something such as a tall wooden stool, and continue to tack-solder the wire to the bottom edge of the shade.

10

*Continue applying the corner wire along the lower edge of the shade.*



Try to tack-solder the wire onto the center of the foiled edge of the glass.

11

*Make sure that the wire on the lower edge of the shade is lying flat.*



Lightly tap the wire to the edge of the foiled glass. Use the metal end of your pliers or a lightweight hammer as you tack so that the wire will lie perfectly flat against the lower edge of the shade. Tack-solder with one hand while holding the wire flat in place with the pliers in your other hand. Shape the wire around the corners using your needle nose pliers and tack-solder into place.

Make a raised bead to cover the wire. Lower the temperature of your iron until the solder "pulls up" when you run your bead. If your iron is too hot, it will make the solder run off the edge. You may have to go around the lower edge a couple of times to completely hide the wire and get a nice, smooth line. Don't forget—flux is your friend when doing this procedure.

**Stained Glass Made Easy, From Cookies to Cutters!**



New Website  
[www.TableFoiler.com](http://www.TableFoiler.com)



- Dispenses, applies & crimps foil in one easy process
- Works on all glass sizes & shapes
- Professional results, even for beginners!

**MagicCutter™**

The Ultimate Companion Tool for all TableFoilers®

- Cuts foil in rollers & adjusts roller height
- Faster & easier than scissors



**Grinder Cookie™**

Great Results without the Grind

- Saves wear & tear on fingers
- More grinding time out of your bit
- Shape allows increased pressure against glass

Ask to see them at your favorite retailer! Or call 1-800-250-1790

**D&L ART GLASS SUPPLY**



Serving kiln forming, torchworking, stained glass artists and stores since 1974

Wholesale Pricing & Quantity Discounts

800.525.0940

303.449.8737

[dlarglass.com](http://dlarglass.com)



D&L Art Glass Supply®  
Denver, CO

- Aisles of Glass
- On-line Ordering
- Superior Service
- Domestic and International
- State-of-the-Art Classroom



**Choose the glass saw that's right for YOU!**



**Ring Saw**

*Gryphon Zephyr+*

Two 7" blades included • Less maintenance



**Band Saw**

*Gryphon C-40*

Now available in a new taller version ideal for cutting bottles



**Wire Saw**

*Gryphon Omni 2+*

Most reliable /least expensive operation  
Six blades included



Gryphon Corporation  
Our 55th Year!  
[www.gryphoncorp.com](http://www.gryphoncorp.com)

Compare all the features at your dealer or on our website

12

*Tin the vase cap and place it on top of the shade.*



Make sure that the cap is sitting level before tack-soldering the shade to the cap at the four outside corners.

13

*Solder the inside corner seams to the vase cap.*



Now that the vase cap has been attached, the shade will feel more rigid. Place two foam wedgies or other props alongside the shade and tack-solder the inside corners of the vase cap to the shade.

14

*Solder a raised bead along the inside corner seams.*



*Tack-solder the vase cap to the solder joints of the shade.*

15



16



*Place the shade on a wooden dowel, such as a long-handled broomstick, while soldering the shade.*



This provides a level surface for completing the solder work. Place a weight on top of the brush end of the broom to secure it, then slip the shade onto the other end. A level isn't really necessary, but using one can help assure you that the whole setup is indeed level.

17

*Finish-solder the shade to conceal the wire.*



Make sure that the tinned foil of the side seams is lying flat against the glass before soldering, then make a nice, rounded solder bead on the outer corners to conceal the wire.

18

*Add decorative solder to the corners and flat side of the shade.*



Reposition the shade on the wooden handle to make the surface level if you add decorative soldering to the flat panel sections.

19

*Clean the shade before applying the patina and wax, then give it a final buffing.*



Wash well with warm water and a white scrubby. Apply patina to the warmed solder seams and wash off patina residue with cold water, soap, and sponge. Dry the shade well and wax. Allow the wax to dry before buffing with a soft cloth. It may be necessary to clean into the small corners with cotton swabs. Place completed shade onto the harp and attach the finial. You can use a timer with your lamp to come on each evening or in the early morning. **GPQ**

*Nancy Wright-Clapson of Classy Glass Studios loves the way colored, textured glass reacts with light and has been working full time with her creations since 2004 at her studio in Douglstown, Quebec, Canada. She enjoys creating lamp shades, custom panel work, and various styles of kaleidoscopes and other 3-D objects, which she exhibits in art galleries along the Gaspé coast. Nancy also does commissioned work and repairs, offers classes, and has a retail shop where sheet glass and supplies are available for her clients and students.*

© Copyright 2017 by Glass Patterns Quarterly. All rights reserved.

# Covington<sup>®</sup> ENGINEERING Since 1848

INNOVATING THE FUTURE OF  
COLDWORKING EQUIPMENT



Call or E-mail Us For a Quote Today! Toll Free (877) 793-6636  
or quotes@covington-engineering.com  
Manufactured In Redlands California



Podcasts featuring interviews  
with world-renowned glass artists  
and respected experts in hot,  
warm, and cold glass

## Peter McGrain

### EPISODE 20

Award winning artist/designer Peter McGrain has been working with stained glass for over 30 years. During that time he has handled every type of stained glass project imaginable, ranging in scope from intimate experimental panels to large-scale architectural installations. The book *Uncommon Stained Glass* charts McGrain's journey from crafter to award-winning artist.

Since the development of McGrain's Vitri-Fusaille process, a hybrid of glass fusing and traditional glass painting, demand for his workshops has been on the rise along with increased gallery interest. His piece *Man with Fish* appeared in *New Glass Review 26*, the Corning Museum's annual survey of avant-garde glass. In 2012, McGrain proved to himself and the world that Vitri-Fusaille could also be used in the creation of architectural work as seen in his commission for the Jewish Home in Rochester, New York, his home town.



Subscribe on iTunes  
or Stitcher today!

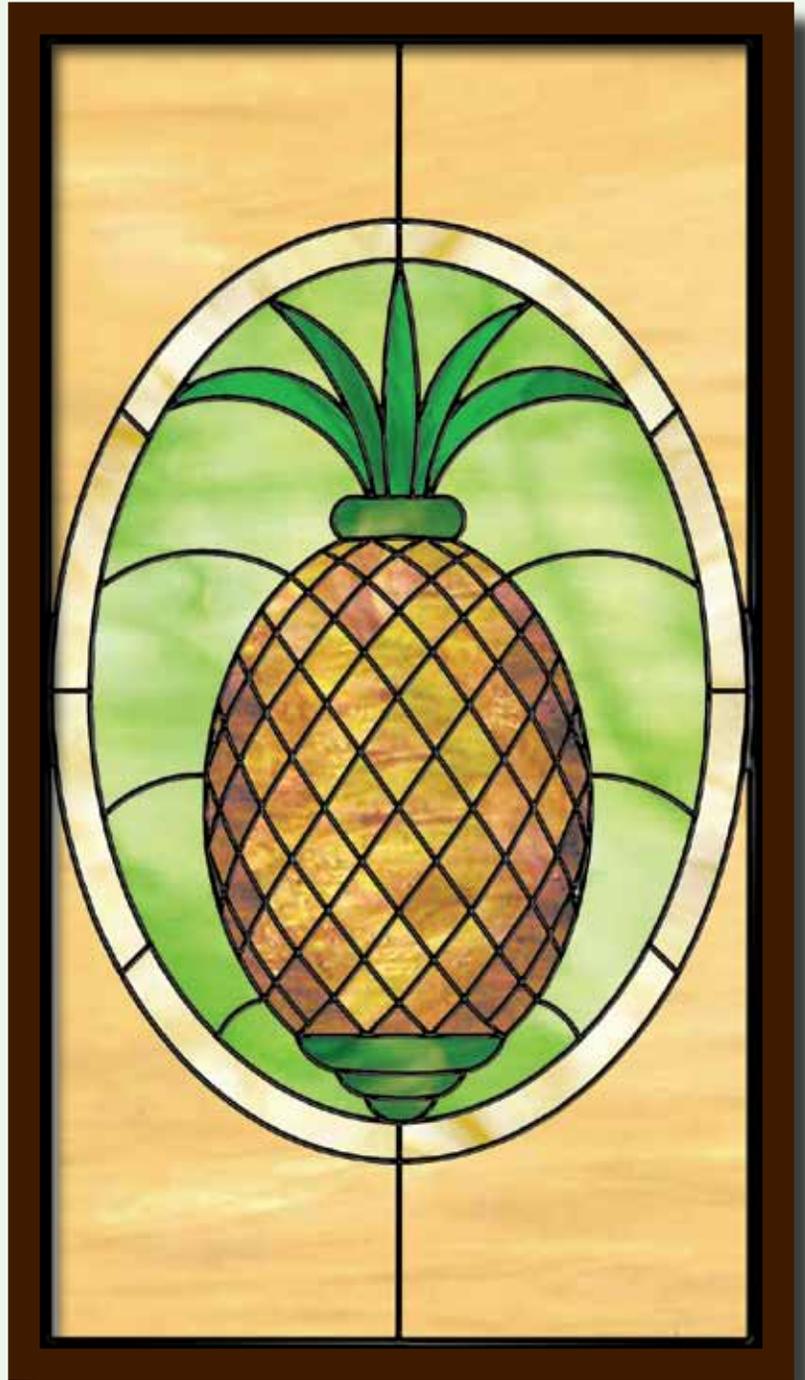
[www.glassartmagazine.com](http://www.glassartmagazine.com)

# Stylized Pineapple

*Design by Glass By Appointment Studio, Text by Darlene Welch*

The pineapple has long been used as a sign of hospitality, appearing as door knockers, bookends, knick-knacks, and many other ornamental objects. You can create this 18" x 33" stained glass panel from the CD *Don't Slam That Cabinet Door!* as a symbol of welcome for your own guests. This collection from Glass By Appointment Studio, located in South Africa and brought to you by Paned Expressions Studios, has over 130 fantastic full-size patterns on CD, including this stylized pineapple, for use in kitchen and bath cabinet doors, lanterns, wine cellars, and beyond.

This is an image only CD with no software provided. The patterns are provided in color and black-and-white versions in JPG, TIF, and GlassEye formats for both PC and Mac. The designs accommodate all levels of glass expertise and include a wide variety of patterns for geometric, nature, floral, contemporary, and traditional motifs that can be flipped, doubled, resized, and recolored, making it easy to fit your own special taste and interior design needs. **GPQ**



## **Wissmach Glass Company**

217-LL Medium Purple/Yellow/Opal/Crystal  
for Pineapple, 2 Sq. Ft.

100-sp Dark Green/Opal  
for Leaves, 1 Sq. Ft.

78-D Medium Amber/Green/Opal/Crystal  
for Center Background, 3 Sq. Ft.

325-D Light Amber/Dense Opal/Crystal  
for Border, 2 Sq. Ft.

325-L Light Amber/Light Opal/Crystal  
for Background, 5 Sq. Ft.

## **Tools and Materials**

7/32" Copper Foil Flux Solder  
Black Patina 1/2" U-channel Zinc

© Copyright 2017 by Glass Patterns Quarterly.  
All rights reserved.

# Glass Craft & Bead Expo 2017

## Live Demonstration Stage

Sponsored by *Glass Patterns Quarterly*,  
*Glass Art*, and *The Flow* Magazines



### Friday, March 31, 2017

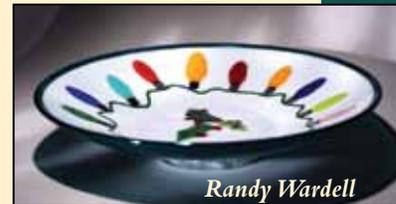
- 11:00 a.m. **Randy Wardell** – How to Add a Cast Foot to a Bowl, Platter, or Vase in a Fusing Kiln
- 12:00 p.m. **Poppy Mussallem** – Hang Your Glass
- 1:00 p.m. **Margaret Zinser** – Borosilicate Monarch Pendant
- 2:00 p.m. **Jackie Truty** – Art Clay Silver Torch Fired Beads
- 3:00 p.m. **Susan Hirsch** – Images in Glass Using Sandblasting and Enameling with Rayzist Photo Mask
- 4:00 p.m. **Rosalind Stanton** – Creating Glass Art with Stainless Steel, Alcohol Ink, and Clear Glass
- 5:00 p.m. **Glass Cutting Contest**

### Saturday, April 1, 2017

- 11:00 p.m. **Margot Clark** – Glass Painting in Layers
- 12:00 p.m. **Lisa St. Martin** – Dichroic Glass Beads
- 1:00 p.m. **Petra Kaiser** – Fuse It with Wissmach Glass and KLB Molds
- 2:00 p.m. **Jeri Warhaftig** – Hollow Beads on a Puffy Mandrel
- 3:00 p.m. **Filip Vogelpohl**, Boise Art Glass – How to Make a Honey Pot
- 4:00 p.m. **Jennifer Walkovich** – Stamp It, Fuse It & Use It

### Sunday, April 2, 2017

- 11:00 a.m. **Dennis Brady** – Working with Mica
- 12:00 p.m. **Auction**
- 1:00 p.m. **Auction**
- 2:00 p.m. **Awards Presentation**



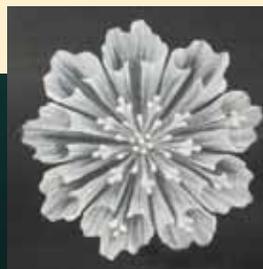
Randy Wardell



Margaret Zinser



Poppy Mussallem



Margot Clark



Jackie Truty



Susan Hirsch



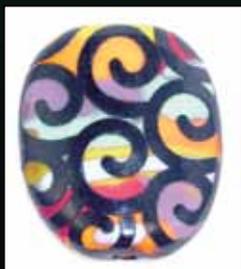
Rosalind Stanton



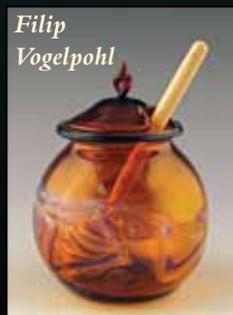
Dennis Brady



Petra Kaiser



Jeri Warhaftig



Filip Vogelpohl



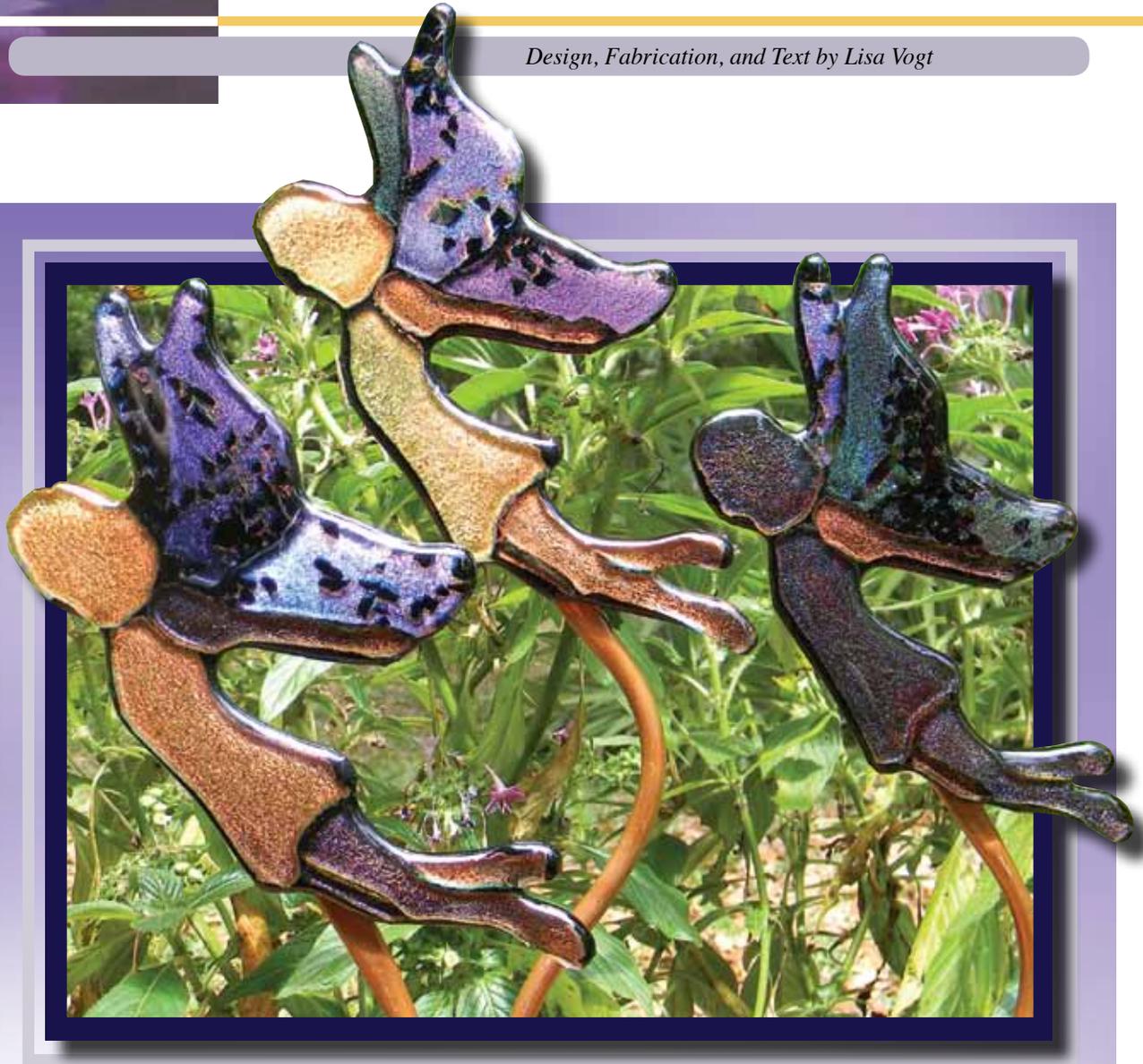
Jennifer Walkovich



Lisa St. Martin

# Fanciful Garden Fairies

*Design, Fabrication, and Text by Lisa Vogt*



Whatever the season, gardens and other outdoor sanctuaries have a magical attraction year round. When nature is the hostess, we're promised ever-changing landscapes and enchanting treasures awaiting our discovery. Such inviting settings are even more special with a little bling tucked in among the foliage, and some glitzy dichroic fairies are sure to dazzle and delight.

These three flying fairies are made with two layers of glass. The base layer is cut out of iridized black, while the second design layer is cut out of dichroic-coated clear glass. The iridized side of the base layer is placed face down and in contact with the kiln shelf during the fusing process. This gives the backside of the finished fairies a subtle shimmer, making them a bit more interesting. Of course, you can substitute flat black glass for the iridized black.

## **Uroboros System 96®**

60-61-56-96IR Thin Iridized Black for Base, 1 Sq. Ft.

## **Coatings By Sandburg**

Cyan Red on Clear for Fairy Dresses and Skin, 1/4 Sheet

Rainbow Splatter for Fairy Wings, 1/4 Sheet

## **Tools and Materials**

Silver Sharpie® Marker Lip Balm

1/4" O.D. Refrigeration Grade Copper Tubing

E6000 Adhesive Wire Cutters

Glass Saw (optional) Hammer

Trace the fairy pattern onto the black base glass with a silver Sharpie marker.



Cut around the outside of the fairy by hand.



Coat the silver Sharpie lines with lip balm to keep the lines from washing away while making detail cuts with the saw.

Use the saw to cut the design's intricate curves and deep cutouts.



If you don't have a saw, the base can be made up of pieces and fit together to form the desired shape.

Cut out the fairy pieces for the second layer of glass from the dichroic-coated clear glass.



Lay the cut dichroic pieces on the black base and check for fit.



Grind the dichroic glass pieces to fine-tune the shapes and smooth the edges to ensure a tight, accurate fit.



Stack the two layers of glass in the kiln and fire the assembled glass to a full-fuse temperature.



Here is the schedule I used, but remember that all kilns fire differently. You may need to make some adjustments in the schedule to fit your own kiln.

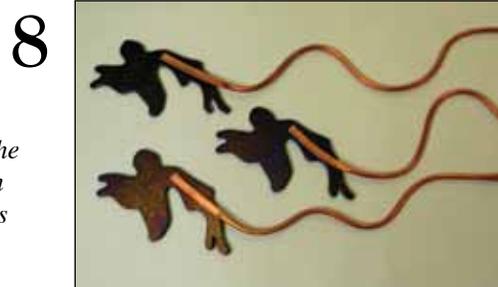
#### Full Fuse Firing Schedule

For projects 8" or smaller with 2 layers of glass

- Segment 1: Ramp 300°F/hr to 1300°F and hold 60 min.
- Segment 2: Ramp 500°F/hr to 1465°F and hold 10 min.
- Segment 3: Ramp 1000°F/hr to 960°F and hold 40 min.
- Segment 4: Ramp 150°F/hr to 800°F and hold 10 min.

Let cool to room temperature undisturbed.

Cut pieces of refrigerator grade copper tubing to the appropriate length for the plant stakes and shape them as desired.



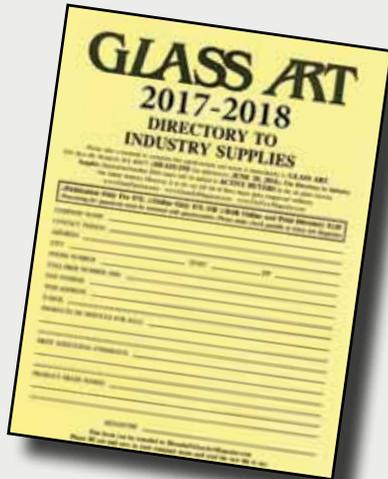
Making the plant stakes for the fairies is easy. Measure a 20" length of 1/4" copper tubing. Grip the tubing firmly with wire cutters and bend it back and forth until it breaks in two. It's okay to crush the tubing, since the flattened end keeps the tube from rotating when it's pushed into dirt. Cut a second 20" piece and a 24" length of tubing in the same way.

The tubing is very malleable, so you can use your hands to bend the three cut pieces of tubing into graceful curves. You can also loosely wrap the tubing around a PVC pipe or other object to get different looks. Using a hammer, flatten a 3" length of bent tubing on one end. Flatten a 1" length of tubing on the other end.

# GLASS ART

## DIRECTORY TO INDUSTRY SUPPLIES

Keep a eye out for this form  
coming in the mail in May.



Take advantage of this exceptional opportunity to have your company listed in **Glass Art Magazine's 2017-2018 Directory to Industry Supplies**.

Our New Online Directory is linked from our sister publications' websites and is linked to our Glass Art Website. The Directory will be part of the September/October 2017 issue and will be mailed to **Active Buyers** who will use this resource to locate and purchase products and services during the **next year!** You may advertise in the **Magazine Directory to Industry Supplies** or **Online Directory** for only \$75 or in both the **Magazine and the Online Industry Directory** for \$120.

**DEADLINE FOR  
DIRECTORY LISTING SUBMISSION:  
June 28, 2017**

**Advertising Space  
Reservations** for September/October 2017 are:  
**Closing**

July 20, 2017

**Materials Due:**

July 30, 2017

### Contact

Rhonda Sewell or Kathy Gentry at  
(502) 222-5631 Fax: (502) 222-4527  
E-mail: Rhonda@glassartmagazine.com

9

Attach the  
copper tubing  
to the glass  
fairies.



Glue the 3" flattened area of the copper tubing to the back side of the fused glass fairies with E6000 or other appropriate, indoor/outdoor waterproof adhesive. Allow the glue to dry before moving the fairies. Now you can simply push the copper tubing with the affixed fairies into soft dirt around the base of a plant and enjoy the company of these flashy little woodland creatures year round.

GPO



*Lisa Vogt discovered glass while pursuing an education in fine art. For more than twenty-five years, this award-winning artist has drawn upon her fine arts background and own sense of style, drama, and whimsy to combine this historic medium with innovative glass techniques for limitless design possibilities. Her work has been on exhibit in major cities throughout the United States.*

*Lisa is the author of fourteen design books and a series of instructional videos in addition to frequent articles for industry magazines and fiction for publication. She also lectures at national and regional seminars and has been a featured artist on HGTV, PBS, and Glass Patterns Quarterly Webinars. A huge supporter of public art, Lisa regularly contributes artwork for auction to benefit local, regional, and national charities. Her home and studio are located north of Tampa Bay in Wesley Chapel, Florida, where she resides with her husband and two daughters. Visit [www.LisaVogt.net](http://www.LisaVogt.net) to find out more about her work and seminars.*



© Copyright 2017 by Glass Patterns Quarterly. All rights reserved.

# ISGB

International Society of Glass Beadmakers

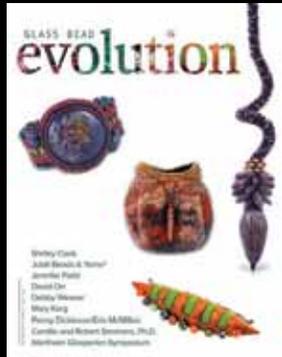
The ISGB is the leading organization for the promotion, education, and appreciation of the art of glass beadmaking for wearable, sculptural and functional art.

**Glass Bead Evolution** is a quarterly digital magazine, included in ISGB membership.

Back issues are available for purchase at [www.isgb.org](http://www.isgb.org)

Join today to begin your subscription and take advantage of other member benefits like vendor discounts.

[www.isgb.org](http://www.isgb.org) | 614.222.2243



## Unique Glass Colors

Manufacturers of Kiln Fired Glass Colors, MUD, Glass Separator, FREE, ACCENTS and Layering Mix!

Add UGC color over built up frit or create custom frit colors and then fire just once!



[info@uniqueglasscolors.com](mailto:info@uniqueglasscolors.com) [uniqueglasscolors.com](http://uniqueglasscolors.com)

407.261.0900 Fax: 407.331.0900

# Learn Fused Glass Online! Visit Our **NEW** Education Center



[aaeglass.com](http://aaeglass.com)



# Daisy Bouquet

Design, Fabrication, and Text by Kelley Mc Hugh

A bouquet of daisies is sure to make someone's day. Now you can create some fused floral cheer to enjoy all year round. We are creating a spray of flowers in yellow and alpine blue, but you can make them in the colors of your choosing. Using Creative Paradise's CPI LF104 Daisy Mold and frit, it's easy to make colorful varieties.



## System 96® COE Glass Frit

F1-200-96 White Powder  
F1-355-96 Marigold Powder  
F2-2382-96 Fine Alpine Blue  
F2-2602-96 Yellow Opal Fine  
F2-200-96 White Fine  
F3-00-96 Clear Medium

## Creative Paradise, Inc.

LF104 Daisy Mold  
GM48 Ripple Drape  
GM51 Slump with Hump  
GM192 Large Organic Slump  
GM195 Organic Control Drop

## Tools and Materials

Respirator Mask Fiber Paper  
Bullseye ThinFire Paper  
Powder Sifter Scotch® Tape  
Container Water Sponge  
1/4" Diamond Core Drill Bit  
Handheld Drill or Dremel Tool  
Flex Shaft or Drill Press Safety Glasses  
#6 or #8 Plastic Anchor with Screws  
1/4"-Diameter Copper Tubing  
Screwdriver 2 Washers  
1"-long #8 Sheet Metal Screw  
2 Pounds Oil-Based Modeling Clay  
4" x 5" Clay Pot 9 Pounds Plaster of Paris  
3 Quarts Water Bucket Mixing Spoon  
Hobby Store Spanish Moss

## Creating the Flowers

1

*Spray the LF104 mold with the ZYP Boron Nitride Mold Release Spray.*



2

*If you do not have the tools needed to drill a hole in the fused daisy, use fiber paper to create a void where you want the hole to be.*



Cut a piece of 1-1/2" x 3-1/2" fiber paper. Roll the fiber paper tightly in a roll and wrap it in a 1/2" x 2" piece of ThinFire Paper. Tape them together with Scotch tape. Place the roll in the center of the flower before you add any frit to the mold. It is **essential** that you wear a respiratory mask any time you are working with frit to avoid inhaling any of the glass powders and frits.

3

Using your fingers, place some F1 White Powder into the center of the daisy.



4

Put some F2 Fine Alpine Blue on top of the F1 White Powder in the center of the mold.



If desired, cast a few pieces of the Alpine Blue into the petal area to create speckles.

5

Use a powder sifter to sift some F1 Marigold Powder into the petals of the daisy to create contrasting color tones.



6

Cover all of the frit and any raised lines in the bottom of the mold with F2 Fine Yellow Opal.



7

Fill up the rest of the mold with F3 Medium Clear until the mold holds a total of 290 grams of frit.



Fuse the daisy using the following suggested schedule. Remember that all kilns fire differently, so you may have to adjust the firing schedule to fit your own kiln.

#### Fusing Schedule

- Segment 1: Ramp 275°F/hr to 1000°F and hold 5 min.
- Segment 2: Ramp 275°F/hr to 1225°F and hold 10 min.
- Segment 3: Ramp 250°F/hr to 1300°F and hold 5 min.
- Segment 4: Ramp 275°F/hr to 1465°F and hold 5 min.
- Segment 5: Ramp 9999 (AFAP\*) to 960°F and hold 60 min.
- Segment 6: Ramp 100°F/hr to 800°F and hold 1 min.

\*as fast as possible

8

Slump the daisies using the following schedule, again adjusting as necessary for your own kiln.



In this tutorial, we used four different slumping molds to create a different look for each flower.

#### Slumping Schedule

- Segment 1: Ramp 275°F/hr to 1000°F and hold 5 min.
- Segment 2: Ramp 275°F/hr to 1225°F and hold 15 min.
- Segment 3: Ramp 250°F/hr to 1250°F and no hold.
- Segment 4: Ramp 275°F/hr to 960°F and hold 90 min.
- Segment 5: Ramp 9999 (AFAP\*) to 825°F and hold 5 min.
- Segment 6: Ramp 100°F/hr to 500°F and no hold.

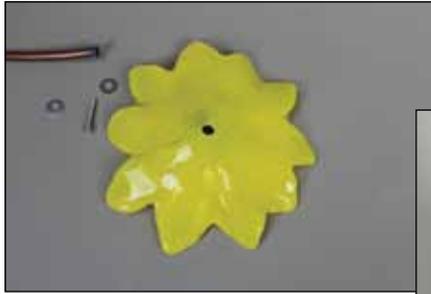
\*as fast as possible

## Adding the Stems

In order to add stems to the daisies so they can be displayed, you will need to drill a hole in the flowers. If you used the optional method for maintaining a hole in the center of the flower in step 2 above, remove the fiber paper at this time.

Find a container that is large enough for the flower head to rest in with 2" of water. Place a sponge in the water, then place the flower on top of the sponge with the bottom of the flower resting on the sponge.

Put a 1/4" diamond-crusted core drill bit in a handheld drill or a Dremel tool with a flex shaft or drill press. Find the center of the flower with the drill bit and carefully drill the hole in the flower, holding the flower steady while drilling.



9



*Prepare the center of the flower for adding the stem.*

Once the hole has been drilled in the center of the flower, push a #6 or #8 plastic anchor into the end of the 1/4" copper tubing. Use a screwdriver head or threader to widen the hole in the copper tubing, if necessary, before putting in the anchor.

10



*Begin to assemble the hardware for attaching the stem.*

Position a washer on each side of the daisy's center hole. Place the screw that came with the anchor (or other #8 screw with threading that runs the entire length of the screw) through the washer and hole in the center of the flower.

11



*Seat the screw in the plastic anchor on the other side.*

Tighten the screw until the glass is held firmly by the screw. Be careful to not overtighten the screw.



12



*Hide the screw head, if desired.*

Paint some glue onto the center of the screw and cover it with the F2 White frit.

**GPO**

## Creating a Daisy Display

Here are the steps for creating a sturdy display as pictured.

- Place about 2 pounds of oil-based modeling clay in the bottom center of a large 4" x 5" clay pot.
- Cut copper tubing to the desired height of each of the daisies using a pipe/tube cutter and push them into the clay, arranging them without the daisies attached.
- Pour 3 quarts of water into a bucket, add 9 pounds of plaster of paris, and stir constantly for 3 minutes.
- Pour the mixed plaster over the clay and allow the plaster to harden. The plaster will fill the bottom of the pot and cover the clay with at least 2 inches of plaster, setting the copper tubes in place and giving the pot enough weight to counterbalance the heavy flowers.
- Place some Spanish moss over the plaster in the pot to give the arrangement a finished look.



*Kelley Mc Hugh earned her degree in journalism from Griffith College in Cork, Ireland. She has lived in the Middle East, Ireland, and England, and now resides in Kansas.*

*Kelley is the social media and website content manager for Creative Paradise, Inc., and helps to create projects and write tutorials using Creative Paradise molds. Visit [www.creativeparadiseglass.com](http://www.creativeparadiseglass.com) for more tutorials and important firing notes.*



## Beveled Cross

Design by Deverie Wood

### Spectrum Glass Company

G - Grape Waterglass®  
for Star Bevel Accents, Scrap  
P - Pink Champagne Waterglass®  
for Cross Border, 1/2 Sq. Ft.  
C - Clear Crystal Ice  
for Cross Interior, 1 Sq. Ft.  
I - Clear Waterglass® Iridescent  
for Circle Background, 1 Sq. Ft.

### Additional Glass

4 Navette Jewels  
(30 mm x 15 mm, 20 mm, and 40 mm)  
3 Bevel Diamonds, 1-3/4" x 3"  
1 Bevel Diamond, 2" x 6"  
1 Square Bevel, 2" x 2"  
4 Star Bevels, 2-3/8" radius

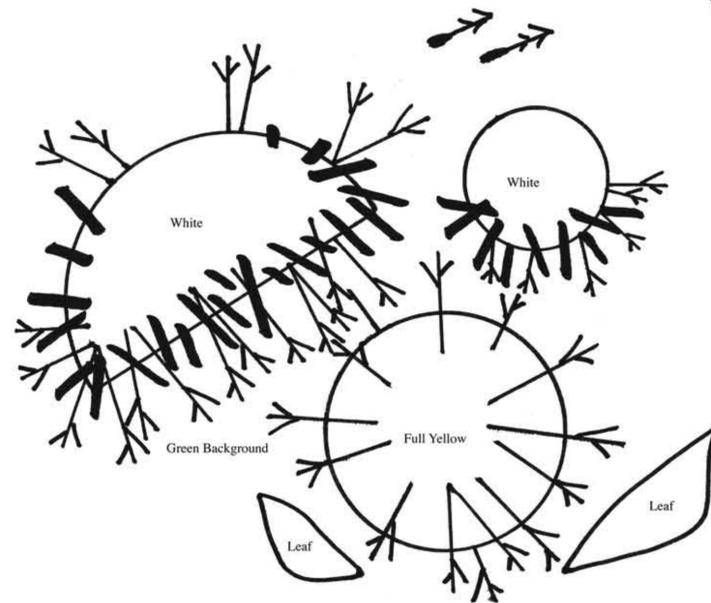


## Fanciful Garden Fairies

Design by Lisa Vogt

### Uroboros System 96®

60-61-56-96IR Thin Iridized Black for Base, 1 Sq. Ft.  
Coatings By Sandburg  
Cyan Red on Clear for Fairy Dresses and Skin, 1/4 Sheet  
Rainbow Splatter for Fairy Wings, 1/4 Sheet



## Designing Dandelions with Stringers

Design by Marcia Fox

### System 96®

220-76SF Dark Green Opalescent for Background, 12" x 13"  
60-93-96 Rootbeer/Cream Specialty Sheet Glass  
for Dandelion Bases, Scrap  
Various Shades of Green, Brown, and Ivory  
for Frit Balls, Scrap  
Yellow and White Stringers  
Yellow, Brown, White, Ivory, and Clear Frit Balls  
White, Yellow, and Green Frit

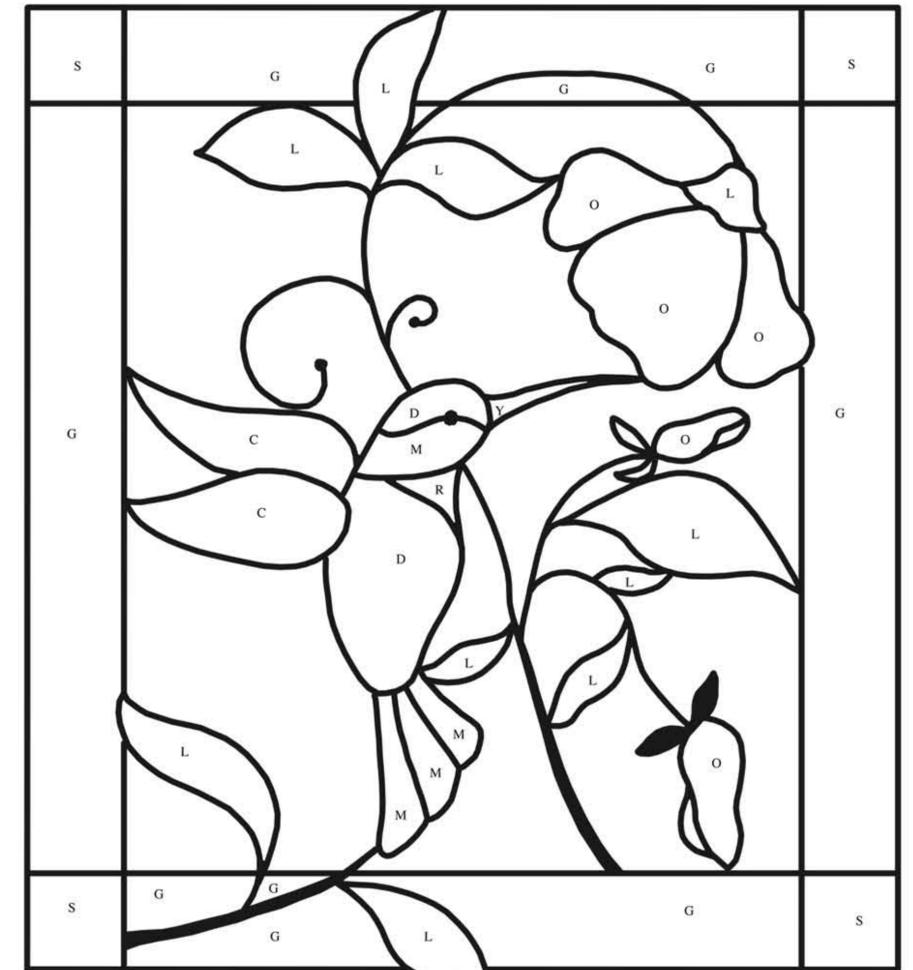
Copyright 2017 Glass Patterns Quarterly, Inc. All rights reserved under Pan American and International copyright conventions. The contents of this magazine and pattern sheet including text, pattern designs, photographs, and/or illustrations are copyrighted. Photocopying and all other types of mechanical or electronic reproduction are prohibited except for making personal copies of patterns for enlargement or reduction or for teaching (one copy of pattern only per student). Copying this material to give or sell to others, except as noted, is prohibited by law. You may build the projects and/or paint the designs from this pattern sheet for your own pleasure, for giving, and for limited retail sales at craft shows, craft malls, stained glass retail stores, and special orders. You may not hire people to mass-produce these designs, or any derivative product made from these designs, for the wholesale, retail, or gift markets or to print brochures marketing these designs (Internet included) without written consent of Glass Patterns Quarterly, Inc., and the contributing designers, and permission/licensing fees negotiated.

## Ruby-Throated Hummingbird

Design by Ann Madsen

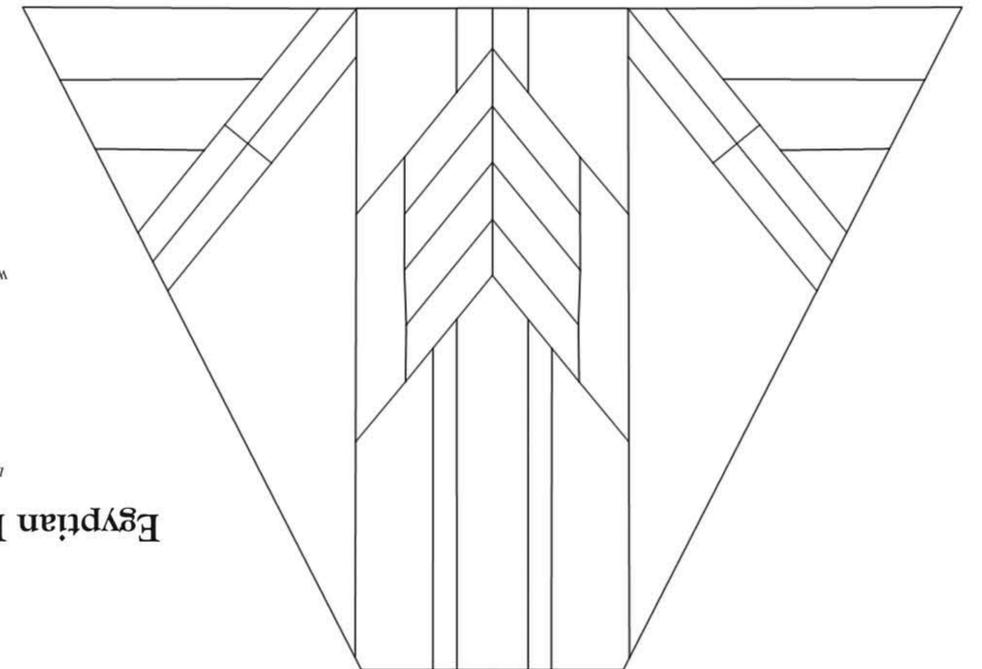
### Wissmach Glass Company

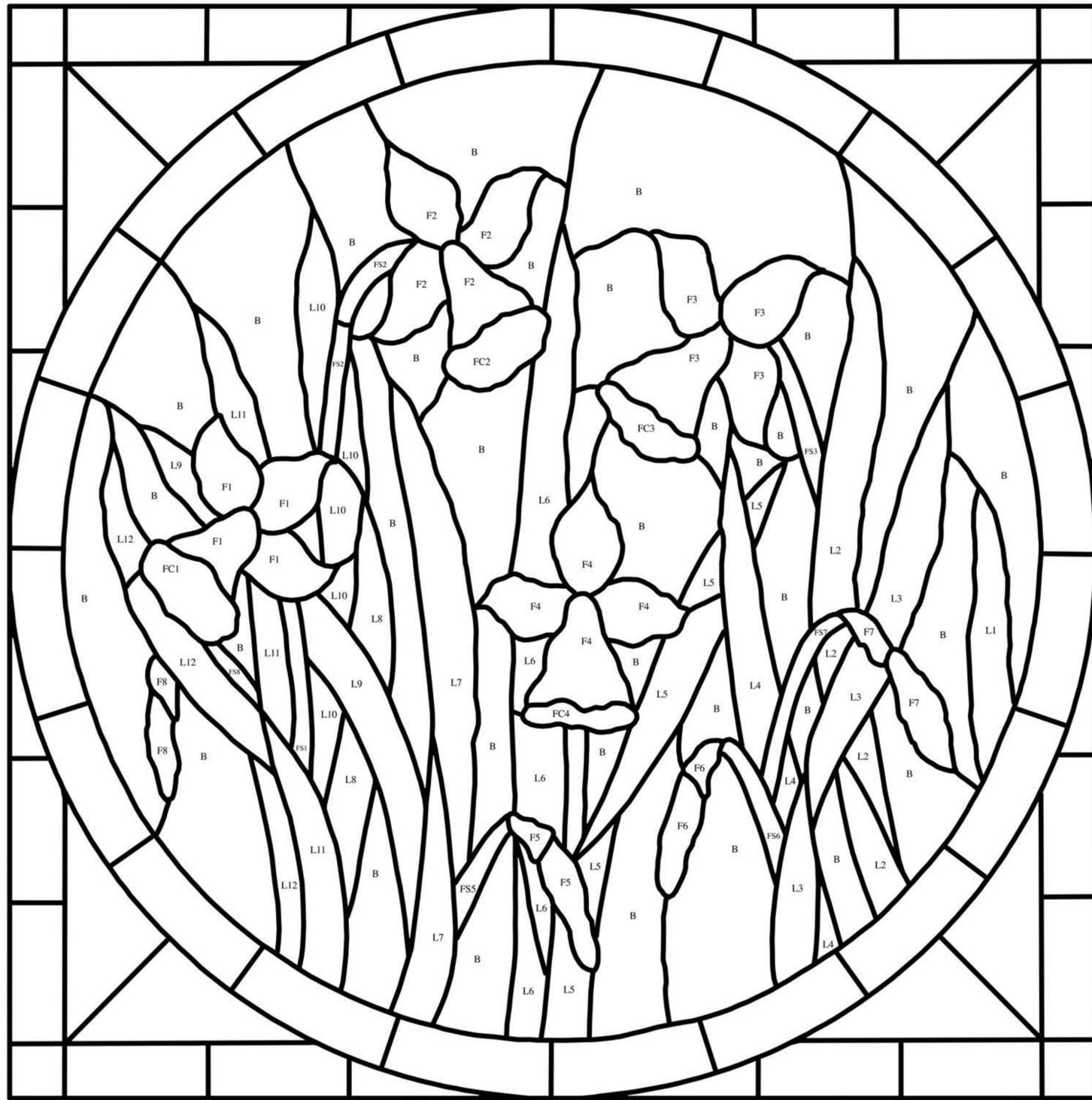
All design pieces cut from scrap glass  
O - Orange/Green/Opal/Crystal for Flower  
L - Dark Green/Opal for Leaves  
Y - Yellow/Opal/Crystal for Beak  
R - Copper Red for Throat  
D - Dark Blue/Yellow Green for Bird Body and Head  
M - Medium Green/Dark Blue for Tail and Head  
C - Dark Blue/Medium Green/Opal/Crystal for Wings  
G - Pastel Green/Blue/Red for Border  
S - Salem Green for Border Corners



## Egyptian Revival Art Deco Lamp

Design by Nancy Wright-Clapson  
Youghogheny Glass  
5002 Stipple Glass, 1/2 Sq. Ft.  
Kokomo Opalescent Glass  
5409 Stipple Glass, 1 Sq. Ft.  
18DDD Hammered Glass, Scrap  
142LL SPLV, Scrap  
111, Scrap  
Wissmach Glass Company  
134 Medium Purple Cord, Scrap  
WO-29 Dark Red/Opal/Crystal, Scrap

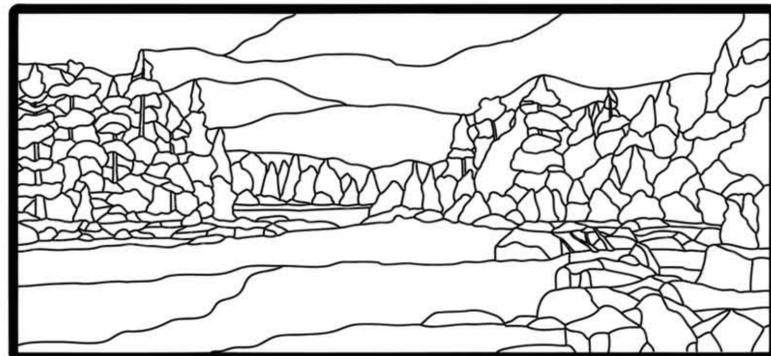




## Daffodil Panel

Design by David Kennedy

**Uroboros Glass Studio**  
 00-78 Light Green/Spring Green for Border and Flower Stems, 1/2 Sq. Ft.  
 60-74 Emerald/Spring/Yellow/Green/White for Foreground Leaves, 1/2 Sq. Ft.  
 60-77 Forest Green/Chartreuse for Background Leaves, 1/2 Sq. Ft.  
 60-165 Greens/Browns/Yellow for Flower Buds, Scrap  
 00-361 Amber/Lemon Yellow/White for Flowers and Flower Centers, 1/2 Sq. Ft.  
**Youghiogheny Glass**  
 1431-SP Ice White/Lime/Emerald Green for Background, 2 Sq. Ft.

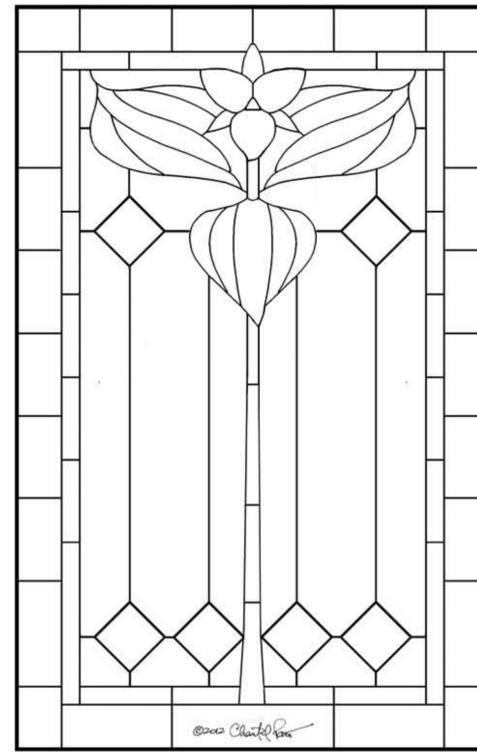


Enlarge to desired size

## Lake Superior Shoreline

Design by Mary Harris

**Wissmach Glass Company**  
 503-L Light Opal/Dark Gray/Brown for Rocks, 1/2 Sq. Ft.  
 503-D Dense Opal/Dark Gray/Brown for Rocks, 1/2 Sq. Ft.  
 502-L Opal/Medium Gray/Brown for Rocks, 1/2 Sq. Ft.  
 119-L Cobalt Blue/Light Opal/Crystal for Water, 3 Sq. Ft.  
 118-D Cobalt Blue/Opal/Crystal for Water, 1/2 Sq. Ft.  
 257-L Medium Purple/Sky Blue/Light Amber/Opal/Crystal for Sky, 4 Sq. Ft.  
 115-L Dark Purple/Green Opalescent for Trees, 1 Sq. Ft.  
 WO-57 Medium Green/Opal/Crystal Wispy for Bushes, 2 Sq. Ft.  
 WO-59 Dark Brown/Green/Opal/Crystal for Bushes, 2 Sq. Ft.  
 100-L Dark Green/Opal for Trees, 4 Sq. Ft.  
 WO-112 Dark Green/Dark Amber/Opal/Crystal Wispy for Background Landscape, 1 Sq. Ft.  
 78-D Medium Amber/Green/Opal/Crystal for Background Trees, 1 Sq. Ft.  
 58-D Medium Amber/Opal/Crystal for Background Trees, 1 Sq. Ft.

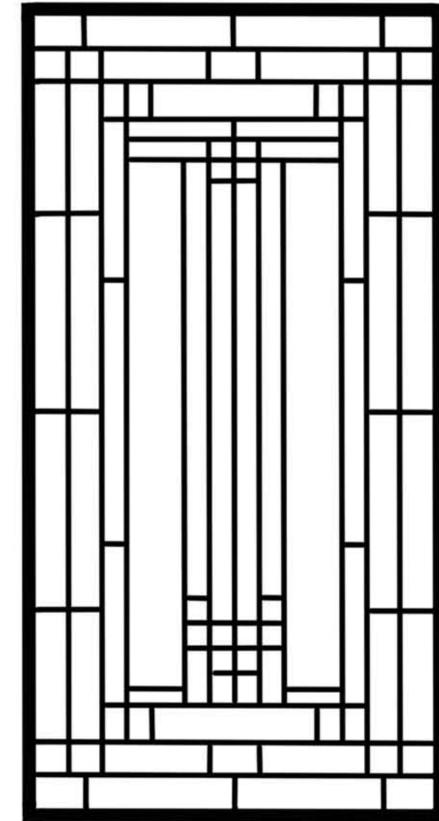


Enlarge to desired size

## Solitary Trillium Combining Foil and Lead Fabrication

Design by Chantal Paré

**Wissmach Glass Company**  
 Seedy-01 Clear Seedy, 3 Sq. Ft.  
**Youghiogheny Glass**  
 1007 R, 1 Sq. Ft.  
 4644 SP, 1 Sq. Ft.  
 1000 SP, 1/4 Sq. Ft.  
 3000 SP, 1/4 Sq. Ft.  
 5002 R, Scrap  
**Additional Glass**  
 3 mm Clear Float Glass, 3 Sq. Ft.  
 6" x 1-1/2" Square Bevels (6)

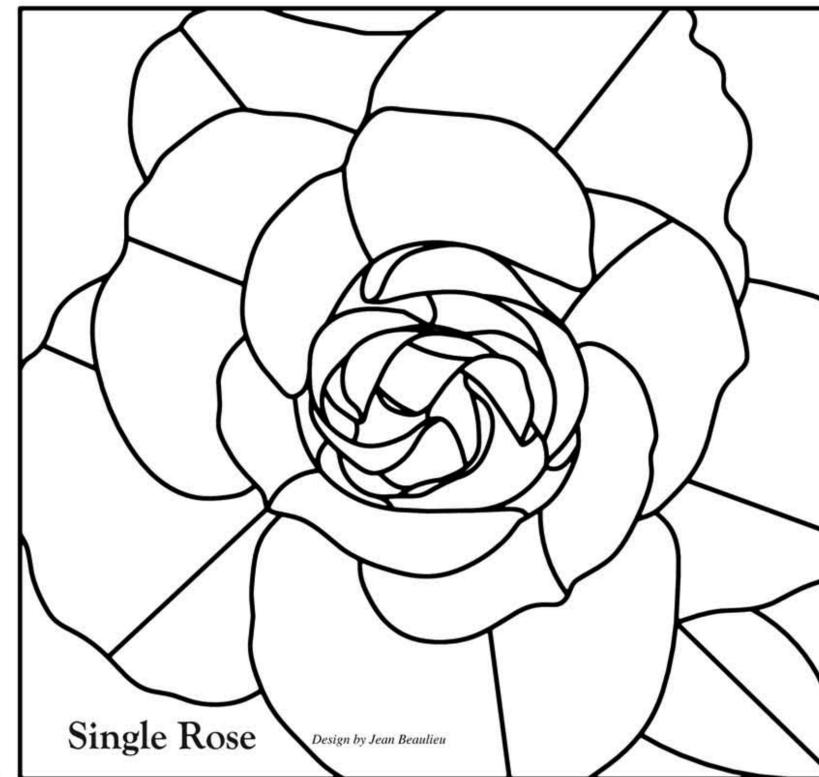


Enlarge to desired size

## Prairie Design

Design by Denny Berkery

**Wissmach Glass Company**  
 44-L Burgandy/Crystal Rough Rolled for Inner Border Accents, Scrap  
 145-G-SP Dark Amber/Opal/Crystal for Inner Border, 2 Sq. Ft.  
 55-L Amber/Green/Opal/Crystal for Design Center, 2 Sq. Ft.  
 155-L Dark Purple/Green/Light Opal/Crystal for Outer Border, 2 Sq. Ft.  
 325-D Light Amber/Opal/Crystal for Background, 2 Sq. Ft.  
 140-D Medium Purple/Opal/Crystal for Center Accents, Scrap  
 78-L Medium Amber/Green/Opal/Crystal for Center Accents, Scrap

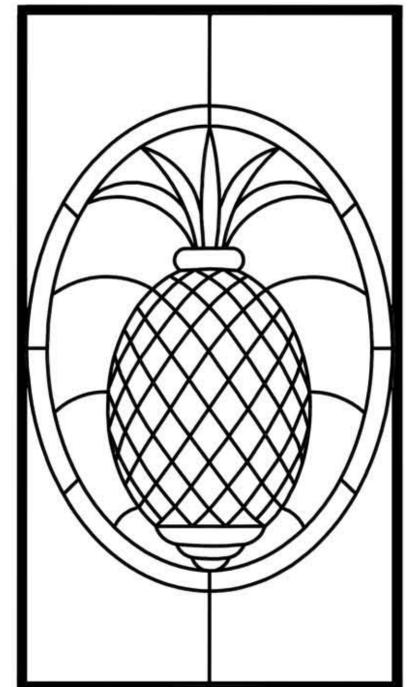


Enlarge to desired size

## Single Rose

Design by Jean Beaulieu

**Wissmach Glass Company**  
 7-L Gold Pink/Opal/Crystal Light Opal for Flower Center, 1 Sq. Ft.  
 7-D Gold Pink/Opal/Crystal Dense Opal for Flower Center, Scrap  
 7-L Gold Pink/Opal/Crystal Streaky for Flower, Scrap  
 191-D Medium Green/Opal/Crystal for Background, Scrap  
 23-L Light Green Opal/Copper Red for Leaf, Scrap



Enlarge to desired size

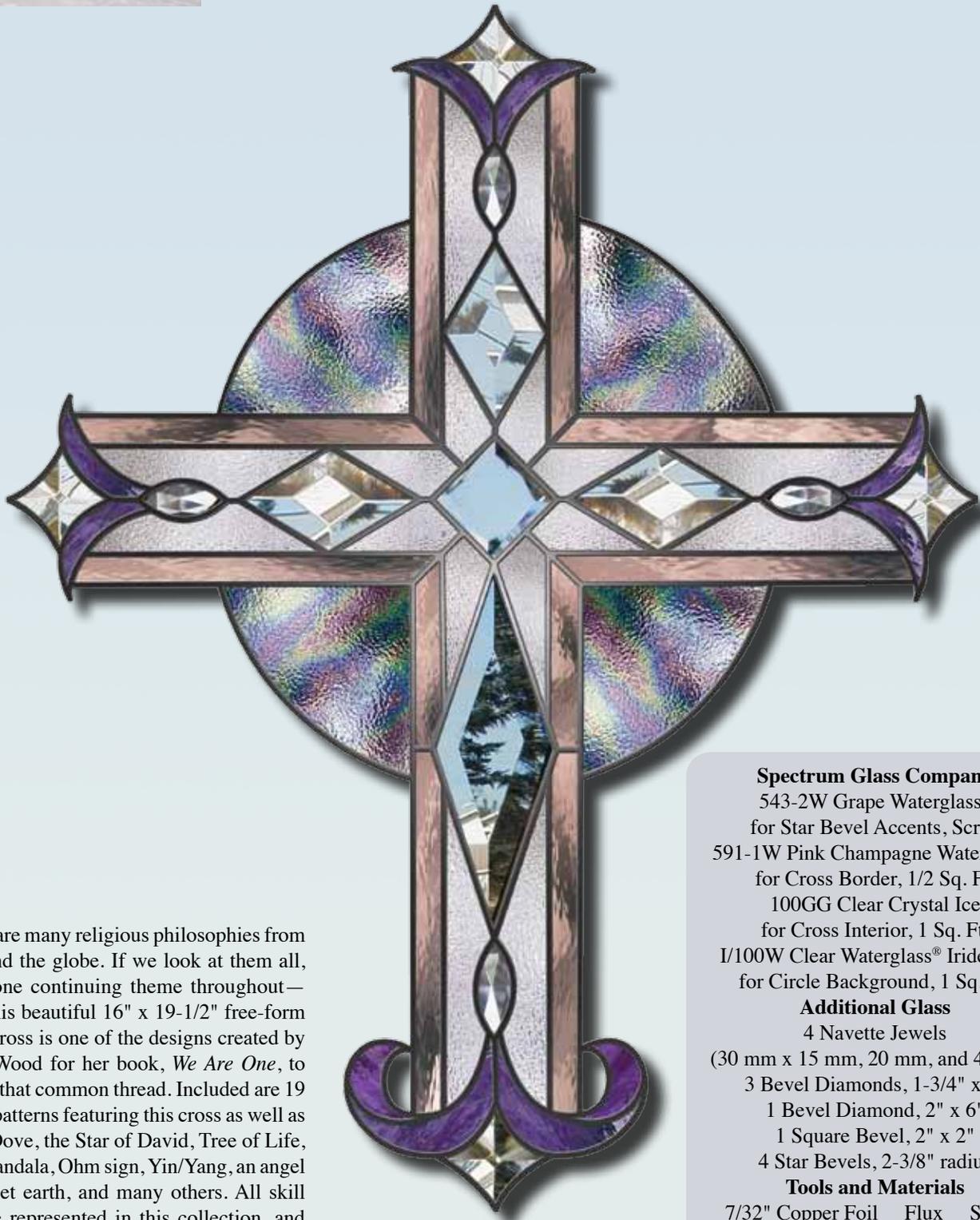
## Stylized Pineapple

Design by Glass By Appointment Studio

**Wissmach Glass Company**  
 217-LL Medium Purple/Yellow/Opal/Crystal for Pineapple, 2 Sq. Ft.  
 100-sp Dark Green/Opal for Leaves, 1 Sq. Ft.  
 78-D Medium Amber/Green/Opal/Crystal for Center Background, 3 Sq. Ft.  
 325-D Light Amber/Dense Opal/Crystal for Border, 2 Sq. Ft.  
 325-L Light Amber/Light Opal/Crystal for Background, 5 Sq. Ft.

# Beveled Cross

Design by Deverie Wood, Text by Darlene Welch



There are many religious philosophies from around the globe. If we look at them all, there is one continuing theme throughout—peace. This beautiful 16" x 19-1/2" free-form beveled cross is one of the designs created by Deverie Wood for her book, *We Are One*, to celebrate that common thread. Included are 19 full-size patterns featuring this cross as well as a Peace Dove, the Star of David, Tree of Life, Lotus, Mandala, Ohm sign, Yin/Yang, an angel with planet earth, and many others. All skill levels are represented in this collection, and each finished project is shown in a full-color photo. Visit [www.deveriewood.com](http://www.deveriewood.com) to view more of her work and patterns. **GPO**

- Spectrum Glass Company**  
543-2W Grape Waterglass®  
for Star Bevel Accents, Scrap  
591-1W Pink Champagne Waterglass®  
for Cross Border, 1/2 Sq. Ft.  
100GG Clear Crystal Ice  
for Cross Interior, 1 Sq. Ft.  
I/100W Clear Waterglass® Iridescent  
for Circle Background, 1 Sq. Ft.
- Additional Glass**  
4 Navette Jewels  
(30 mm x 15 mm, 20 mm, and 40 mm)  
3 Bevel Diamonds, 1-3/4" x 3"  
1 Bevel Diamond, 2" x 6"  
1 Square Bevel, 2" x 2"  
4 Star Bevels, 2-3/8" radius
- Tools and Materials**  
7/32" Copper Foil Flux Solder  
Black Patina 1/4" U-Channel Zinc

© Copyright 2017 by Glass Patterns Quarterly.  
All rights reserved.

# Somebirdy Needs a Bath!

*Design, Fabrication, and Text by Jim Matthews*

I always thought of a birdbath as balanced on top of a pedestal or mounted on the end of a pole and stuck in the ground, which precluded me giving much thought to making one. Then I saw a *hanging* birdbath and got the idea for this colorful fused glass project.

The design is made up of a clear inner circle and a perimeter of transparent, organic shaped pieces. For sparkle, a layer of coarse iridescent clear adds texture to the inner bowl. One contour fuse and one slump complete the firings. Then, if you do it my way, it's not even necessary to drill any holes.

This project is great for using your scrap glass and adapts to almost any bowl shaped mold you have around. Don't use anything too deep, however. A birdbath should mimic a rain puddle, not a rain barrel. Also avoid using white glass. Birds are attracted to color, but white is their danger signal. Above all, have fun with this!

## **System 96®**

### **Sheet Glass**

100SF Clear, 8" circle

*All colored glass cut from scrap*

151SF Cherry Red

161SF Yellow

171SF Orange

533-1SF Sky Blue

110.8SF Medium Amber

538-2SF Light Steel

528-2SF Light Olive

543-1SF Light Grape

121SF Light Green

60-7312-96 Lime

### **Frit**

F5-00-96-IR Clear Iridescent

### **Tools and Materials**

Firing Paper Bailing Wire

Hanging Chain S-Hook

Firelite Forms #693 Round

Deep Bowl Mold



1

Prepare the firing paper and clear glass circle.



Trace the perimeter of the slumping mold onto firing paper and place the paper onto a kiln shelf. Because it won't be portable after assembly, it's important to build this project on the shelf.

Cut a clear circle that is approximately 3-1/2" smaller than the diameter of the mold. My mold is 11-1/2", so I cut an 8" inner circle. Center the inner circle inside the drawn perimeter, leaving about 1-3/4" of border area on all sides.

2

Use nippers or a saw to create varying sizes of organic shapes from light, transparent colors.



If you like, roughen up the edge of the inner circle as well.

3

Lay the shapes out to fill the border area without any overlap of adjacent pieces or on the inner circle.



Stay largely within the drawn perimeter. Open spaces are natural and desirable.

4

Connect everything together by placing additional pieces of glass on top.



One piece on top can connect a few of the border pieces to each other and to the inner circle. Make sure there are no "floaters." Every piece needs to be attached to other pieces as well and either directly or indirectly to the inner circle.

5

Spread a layer of iridescent clear frit, either coarse or mosaic grade, across the flat of the inner circle.



Carefully transfer the kiln shelf and assembled project into the kiln. Fire to a contour fuse following the schedule suggested here. Remember, however, that each kiln fires differently, so you may have to make some adjustments to fit your own particular kiln.

### Contour Fuse Schedule

- Segment 1: Ramp 300°F/hr to 1050°F and hold 30 min.
- Segment 2: Ramp 300°F/hr to 1385°F and hold 5 min.
- Segment 3: Ramp 9999 (AFAP\*) to 950°F and hold 60 min.
- Segment 4: Ramp 150°F/hr to 775°F and hold 10 min.
- Segment 5: Ramp 200°F/hr to 200°F and no hold.

\*as fast as possible

6

Once the fuse firing is complete, carefully center the fused project on the slumping mold and fire a second time, following the suggested schedule.



### Slumping Schedule

- Segment 1: Ramp 225°F/hr to 1050°F and hold 30 min.
- Segment 2: Ramp 200°F/hr to 1225°F and hold 12 min.
- Segment 3: Ramp 9999 (AFAP\*) to 950°F and hold 60 min.
- Segment 4: Ramp 150°F/hr to 775°F and hold 10 min.
- Segment 5: Ramp 200°F/hr to 200°F and hold 0 min.

\*as fast as possible

7

Wind a length of bailing wire around a bottle to create three loops about 2" in diameter.



You can also use other stiff, formable wire if you prefer.

8

Snip each loop of wire so that it forms a hoop with about 1/2" of overlap at both ends.



9

Fold each end back on itself to form 2 hooks that will intersect together and easily disconnect.



10

Attach the hoop to the bowl.



To attach each hoop to the bowl, feed one end through an open space in the border, then link its two hooked ends into each other and close with pliers. Position the three wire hoops more or less equidistant from each other around the rim of the bowl.

11

Attach the hanging chain to the birdbath.



Cut three lengths of hanging chain, each about 20" long. Attach one end of each chain to one of the wire hoops and connect the loose ends with an S-hook where they meet at the apex. **GPO**



## Stained Glass School

2017 Class ❖ Raytown, Missouri

### SGS: Stained Glass 101

*Introduction to Cold and Warm Glass Fabrication Techniques*

**April 4-7, 2017 Four Days with  
Two Daily Sessions Only \$350**

**Call 800.438.9581 to Register by March 13, 2017!**

#### **MORNING SESSION: Cold Glass Fabrication:**

**Instructor:** Jack Whitworth, Whitworth Stained Glass

Students will create a small panel that can be carried in luggage. Students will gain a professional understanding for the art of glass and the methods used in fabrication including advanced techniques for creating a focal point, handling negative space and use of borders to frame or not! The panel will also incorporate a piece created during the afternoon warm glass session

#### **AFTERNOON SESSION: Warm Glass Fabrication:**

**Instructor:** Louis Curiel, Curiel Reynolds School of Visual Arts

Students will be introduced to the professional art of warm glass/kiln formed glass. Using stringers, frit, and scrap glass, students will learn procedures for fusing including layering, firing schedules for size/texture, temperature control, tack & full fusing and annealing.

By creating an embellishment or main subject piece to be used in the fabrication of a panel, students will have a complete understanding of both processes and how they can work together.

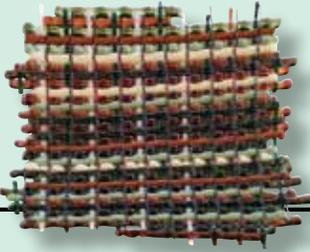
*Jim Matthews spent his entire career with Spectrum Glass Company in all aspects of sales, marketing, and business development.*

*He was an instrumental contributor to the company's progress and their many art glass innovations across 34 years from 1978 to 2012.*

*In 2015, Jim launched the popular website and blog, Glasshoppa.com, and began producing and publishing free video glass projects for novice and intermediate glass fusers. Jim lives in Woodinville, Washington, with the best woman ever, a totally awesome son, and a so-so cat named Fred.*

# Glass Expert Webinars™

Live Two-Hour Webinars with Renowned Glass Artists  
**No Traveling Required!**



**Josh Mazet**

*Marble Making and Boro Critters* March 7



**Dennis Brady**

*Glass Weaving* March 9



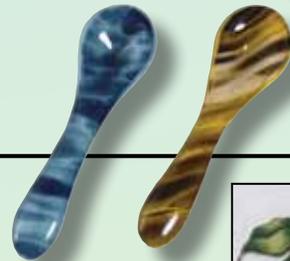
**Barbara Becker Simon**

*Hollow Flameworked Beads* March 16



**Gil Reynolds**

*Flow Bar and Advanced Pattern Bars*  
March 23



**Stephanie O'Toole**

*Let's Spoon!* April 11 and 13



**Gil Reynolds**

*Fused Glass Breakthroughs* April 18



**Margot Clark**

*Creating Accents and Artisans* April 25



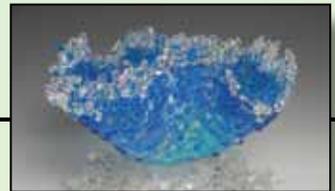
**Gil Reynolds**

*How to Change the Shape of Glass in a Kiln Lecture*  
April 27



**Lisa Vogt**

*Creative Slumping* May 9



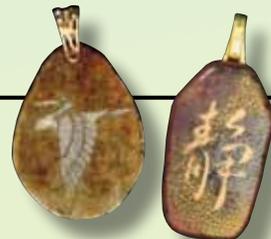
**Dennis Brady**

*Simply Super Sandblasting* May 11



**Barry Kaiser**

*Images on Glass* May 16



**Cathy Claycomb**

*Copper Foil Overlay* May 18



**Dennis Brady**

*Coldworking* May 23



**Richard La Londe**

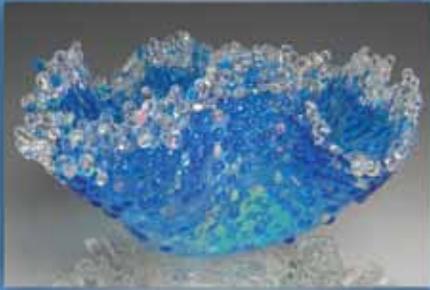
*Liquid Glass Line Lecture* May 25



Visit the Glass Expert Webinars™ link under "What's New" at [www.GlassPatterns.com](http://www.GlassPatterns.com) for more details and local times.

**Inspiration! Knowledge!  
Confidence!**

Get the tools you need to  
create exceptional glass art.



**Advanced Glass Fusing  
with Lisa Vogt**

**4-Day, Hands-on Workshop  
Wesley Chapel, Florida**

**May 2-5, 2017  
September 26-29, 2017**

Order online:  
[www.LisaVogt.net](http://www.LisaVogt.net)

## What's New



Tanya Veit and AAE Glass are happy to announce the **launch of the online Education Center** that now hosts free videos and product tutorials as well as paid workshops covering techniques from several different areas. Select workshops include a private Facebook group for all artists who take the online workshop and offers something for every skill level. You will be able to watch your video anytime and anywhere you have access to an Internet connection and will receive PDF handouts complete with firing schedules and notes. The private Facebook feature is something Tanya wanted to include in order to give artists a place to interact with her as well as other artists who have taken the same online class. Many questions are raised and answered, and the continued access to learning has proven to be invaluable after the initial workshop. You will also earn Education Coins when you shop at the website that can be used to watch paid videos at a discount or for free. Visit the website today to begin, continue, or revitalize your fused glass dreams.

239-471-7724

[www.aeeglass.com](http://www.aeeglass.com)

**Creative Paradise Inc.** (CPI) is starting 2017 full of cheer and a garden of inspiration. **Two new molds** are now in production and ready to ship, the 5.75" LF153 Zinnia Mold and the 6.5" LF154 Hibiscus Mold. The company will be producing tutorials for using the molds. Also check the "Free Tutorial" program from CPI for a new "Sea Shore Tray" tutorial featuring the company's LF149, LF150, and GM97 molds. Call or e-mail for more details.

316-794-8621 [creativeparadisec@live.com](mailto:creativeparadisec@live.com)

[www.creativeparadiseglass.com](http://www.creativeparadiseglass.com)



**FIRELITE  
FORMS**  
BUY U.S.A.  
TEL: 941-371-5492  
[www.fireliteformsmolds.com](http://www.fireliteformsmolds.com)  
Email: [fireliteformsmolds@yahoo.com](mailto:fireliteformsmolds@yahoo.com)  
5704 Lawton Dr., Sarasota, FL 34233

### Introducing New Molds for 2017



**STOP Searching...We have it...**

**Ceramic & Stainless Steel**

**MOLDS**

**Choice of 400 Molds**



**McMow Art Glass and Wardell Publications** present **Glass Quest 2017**, a weekend of education, inspiration, and engagement for glass enthusiasts in West Palm Beach, Florida, May 26-28, 2017.

Attendees will have the opportunity to meet and partner with other glass artists and push the boundaries of glass as a contemporary art form. Maureen James, art glass educator and publisher of *Glass Patterns Quarterly*, *Glass Art*, and *The Flow* magazines, will be the keynote speaker. As a member of the board of the International Art Glass Suppliers Association and 2012 recipient of the organization's Lifetime Achievement Award, she has been influential in bringing glass education to the masses. The event will also include lectures and demonstrations from professional glass artists from across the country, an extraordinary kiln forming experience hosted by Jen-Ken Kilns, and opportunities to review and purchase the latest, greatest tools, supplies, and equipment from select manufacturers. Call or e-mail to find out more about taking advantage of this exciting opportunity.

561-585-9011

[taylor@mcmow.com](mailto:taylor@mcmow.com)

**Paragon Industries**, presents the **Sentinel Smart Touch**, a new optional touch screen controller. The Sentinel uses the same wiring harness as Paragon's standard Sentry 12-key controller and can replace the 12-key on existing Paragon kilns. It can be updated through W-Fi, and custom Ramp-Hold programs can have a program title entered through the touch screen. The firing schedule can be edited during firing using Skip Step, Add Segments, Add Temperature, and Add Time. The Sentinel can also turn a kiln vent on or off for each segment of a program. Visit the company's website for more details.

800-876-4328

[www.paragonweb.com](http://www.paragonweb.com)





**Coatings By Sandberg (CBS)** is sponsoring its **12th Annual Dichroic by Design Contest** using Dichroic glass in an artistic or functional piece. The company will be accepting photographs of

artwork and placing the winning pieces on its website so the world can see what its talented customers have created with CBS quality Dichroic Glass Coatings. Prizes include a first place \$500 gift certificate for CBS Dichroic glass, a second place \$250 CBS gift certificate, and a third place \$200 CBS gift certificate. Runners-up and honorable mention awards will also receive Dichroic certificates. Categories are included for Professional and Emerging (Beginning) Artists in Dichroic Extract, Blown Glass, Lampworked Glass, Fused Glass, Glass Jewelry, Sculpture, Glass Marbles, Architectural Glass, and Miscellaneous Glass. Entries must be submitted by November 17, 2017. Visit the "Contest" drop-down on the CBS website home page for more details on how to submit.

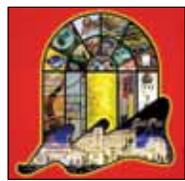
714-538-0888

[www.cbs-dichroic.com](http://www.cbs-dichroic.com)

**His Glassworks** is now offering **two different 3M Buttercut sandblast resists** in the 45 mil 507 and 35 mil models. Both are excellent for sandblasting and acid etching on your glass. The 507 material is available in 12 inch by 10 yard and 24 inch by 10 yard rolls as well as by the square foot. The 1532 material is available in 15 inch by 10 yard and 30 inch by 10 yard rolls. These products and the new 2017 catalog are available online or by phone.

8009147463 8282542559

[www.hisglassworks.com](http://www.hisglassworks.com)



**Glass Craft & Bead Expo** will be presenting Margot Clark, Peggy Pettigrew Stewart, and Dennis Brady in an **open-forum discussion** on Sunday, April 2, 2017, from 8:30 to 9:50 a.m. during the upcoming Expo to learn more about how to work with float glass, also known as window glass, to create glass art. Bring your questions and join our exchange on how to add color to float glass with paints, enamels, mic, and even inks and dyes. Coffee and donuts will be provided by Unique Glass Colors and Victorian Art Glass. The forum is free but seating is limited, so you must sign up for Class SU-03 at the Expo website.

800-217-4527 amy@lvmanagement.com

[www.glasscraftexpo.com](http://www.glasscraftexpo.com)

**Uroboros Glass** will find a **new home in 2017**. The sale of the Uroboros Glass name, equipment, technology, and formulas has been completed, and all current colors and product lines, including System 96® and FX90 fusible products plus traditional art glass and contracted custom-produced glass products, are expected to be available again in the months ahead. The new owner, Oceanside Glasstile (OGT), headquartered in Carlsbad, California, has 25 years of experience in decorative glass tile design and manufacturing with a proven track record of developing and dependably supplying aesthetically superior, responsibly made colored glass products. Over the next few months, production at Uroboros in Portland will begin shutdown to prepare for the move. Eric Lovell, founder and president of Uroboros, and several long-term Uroboros employees will be closely involved with the start-up of production in Mexico and will continue to be involved with the Uroboros brand. Remaining inventory and new production should be available from Uroboros/OGT starting mid-May 2017, with remaining inventory and new production for frit, stringer, noodles, rods, and other accessory items available in early June. Current Uroboros distributors are encouraged to contact OGT for initial product inquiries and orders.

info@glasstile.com

[www.glasstile.com](http://www.glasstile.com)



**GPO**

Send your What's New information to

Due date for Summer 2017  
April 20, 2017

Glass Patterns Quarterly  
8300 Hidden Valley Road,  
P.O. Box 69, Westport, KY 40077  
info@GlassPatterns.com

## "Flight into Fantasy"

Three Dimensional Kits



Each kit contains a solid cast body that accepts copper, antique patina or paint, and a full-size pattern with instructions.

"Flight Into Fantasy" kits offer Hummingbirds, Angels, Cardinals, Eagles, Ducks, Rooster, Dragons, Elf & Santa Faces, Dove, Moths, Flowers, Fairy Lady, Butterflies, Macaw, Parrot, and Victoria.

Available at your local stained glass supplier

**WHITTEMORE-DURGIN  
GLASS COMPANY**



Celebrating 50 years of stained glass supplies



**Stained glass patterns,** kits, tools, supplies, books, jewels, mosaic and etching supplies, jewelry findings, and things you never knew you needed until now.

And glass. **Lots** of glass.

Shop online:  
[www.whittemoredurgin.com](http://www.whittemoredurgin.com)

Visit our fun store:  
**825 Market St.  
Rockland, Mass.  
(800) 262-1790**

# Designer Eggs Created with MUD

*Design, Fabrication, and Text by Margot Clark*

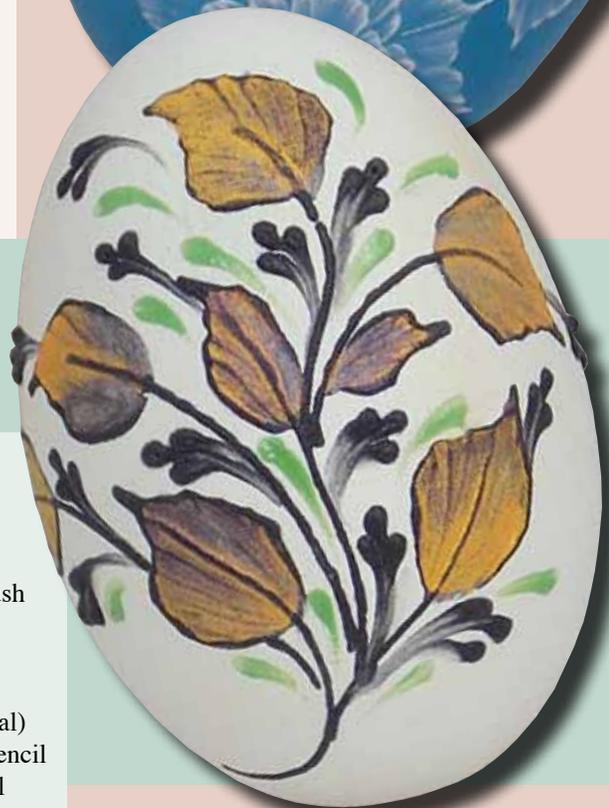
I love to give students lots of options when I teach a class, so I'd like to do that same thing in this article. You'll learn how to create a basic design, then I'll show photos of how to change it to fit different surfaces and techniques. Since this is springtime I am using egg shapes, but these techniques can be done on flat glass, porcelain—any surface that can fire to 1400°F. You can also use MUD, both Black and White, for unfired decoration.

The MUD kit contains both Black and White MUD, as well as all of the tools you will need to complete this project. Prepare the MUD by filling both disposable decorating bags—one with Black MUD and one with White—according to the directions in the MUD Kit. Be sure to keep the sponge moist at all times and keep the metal tips inserted into the damp sponge when they are not in use.

The basic design will be created on one of the ceramic bisque eggs. You can use either a white ceramic bisque egg or a ceramic bisque egg with a turquoise matte glaze applied and fired prior to applying the MUD design.

I like to practice a bit first before going on to my “real” surface. However, the practice piece can still be used as a finished item. Try not to get any of the Black MUD on the surface of the bisque since it will stain, but if you do, use fine sandpaper to sand off the stain.

This project uses three design elements—a “dribble, catch, and pull” technique, dots, and lines. Everything I create in this MUD Technique on anything I create is based on these same three design elements. You will see how they can become so many things as we progress.



## **Unique Glass Colors**

Deluxe MUD Kit

## **Optional Unique Materials**

701 Brass ACCENTS

10/0 Margot's Script Liner Brush

1962 Mint Green NT

## **Tools and Materials**

Ceramic Bisque Eggs

Turquoise Matte Glaze (optional)

Oval Template White Chalk Pencil

Non- or Low-Graphite Pencil

Wax Free White Graphite

Wax Free Gray Graphite

1

*Draw an oval on the surface of the egg.*



Use an oval template or draw freehand using a non- or low-graphite pencil on the bisque egg. If you're using a bisque egg with a glazed surface, use a white graphite or chalk pencil to draw the oval. Transfer the scroll pattern or create it freehand.

2

*Apply the MUD scroll lines to the egg.*



Practice the lines a bit on some paper first to get the feel of the MUD coming out of the decorator bag. Light pressure is all that is needed.

Using the tip on the decorating bag, begin with the outer line. Come just to where the scroll will be located and use the end of the scroll lines to continue the outside line. This will help the design flow and make sure there is no heavy buildup of MUD along the outer edge. Let the MUD dry.

3

*Begin to cross over the inside of the scroll sections.*



Let the MUD dry before creating the lines that cross over.

4

*Cross over in the opposite direction.*



The scroll lines are done. Let the piece dry.

5



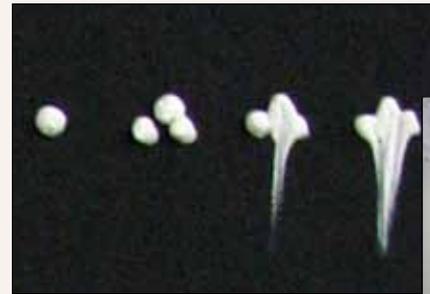
*Using the Margot's Miracle Brush, practice the leaves then add them to the opening of the scrolls.*



The leaves are created using the "dribble, catch, and pull" stroke. What this means is that you are going to dribble along the outer edge of the leaf using the metal tip, then switch to the flattened brush and catch the top of the dribble. Using a light touch, you will then gently pull the MUD toward where the center vein line would be located. Note that you only come about halfway down the outer edges with the MUD so that there is no excess MUD at the bottom end of the leaves.

Dampen the brush in water and flatten it in a bit of Medium. Use the flat side if you want smooth leaves or the sharp, chiseled edge if you want a more serrated leaf, or do some of both! Your choice. Note that both the brush and Medium are included in the MUD Kit. Let the piece dry.

6



*Add the dot clusters.*



The next addition will be what I call Dot Clusters, even though sometimes there is only one! These can be new growth, decoration, stamens, snowflakes, daisies, or other things. It all depends on where they are in the design as to their function.

Squeeze out three dots with one of them higher in the center. Really flatten the brush in a bit of Medium. Using the brush on its chiseled edge, barely touch the corner of the brush into the middle dot. Staying on the very end hairs on the brush edge, cut down to form the bottom of the stroke. If you are creating a stroke that curves, roll the brush in your fingers to stay on the chisel edge. Add Dot Clusters to the beginning lines of each of the scrolls, cutting into the existing outer edges of the scrolls to complete the stroke.

I have a video snippet that you may want to watch so you can see this technique in action. Go to [Vimeo.com/margotclark](https://www.vimeo.com/margotclark) and look for "MUD Three Dot Clusters." There are other videos there as well on loading the bag and other techniques to further aid you in your MUDDING experience.

7

Add some cluster strokes inside the oval following the curve of the scroll sections.



Remember to roll the brush in your fingers to keep the fine ending to the stroke. The scrolls are now complete.



Create the flowers using the "dribble, catch, and pull" technique.

8



Like the leaves, you are going to dribble along the outer edge of the petal using the metal tip. Then switching to the flattened brush, you will catch the top of the dribble and pull it to where the petals attach to the stem.

Bisque is very absorbent, so I found that stroking over the area with a bit of Medium before beginning the dribble and keeping a bit more Medium in the brush made it much easier to pull down the stroke. You can vary the strength of the MUD this way too, since a bit more Medium will give the petals some translucency.

Place a tiny dot of MUD at the center of the flower. The distance that you start away from that center will determine the size of the flower. Add a flower at each end of the scrollwork.

Place a dot out as far as you want the size of the petals to be. By painting them in the order shown, you will end up with great spacing, since you are not using any pattern for this. Do not stress if they are not all the same size. Close is good enough. Try to make the outer edges uneven, since that looks the best. Let dry.

9

Add two more flowers to the sides of the oval and let dry.



10

On the bottom of each flower add two leaves, tucking them close to the edge of the oval.



Add two more flowers to each side, placing them between the first flowers.

11



Let dry and add one more flower. Allow for drying time so you don't smudge the wet MUD.



Apply more leaves wherever you like, then add the flower centers.

12



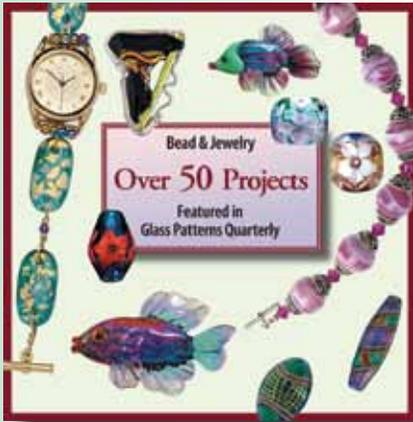
Add a dot in the middle and one to each side, then add two more to each side to round out the center of the flowers. Don't let the dots touch one another, or they will form one big dot! If you want more dots, allow the first ones to dry before adding more.

13

Fire the MUD decorations.



Here are all the samples before and after firing. They were fired at the same time using the following schedule. All of these samples look pretty much the same, except that the Black MUD fires darker. Unfired, it is a dark charcoal color.



On this Bead & Jewelry CD you'll find a collection of fifty-two bead and jewelry projects in PDF format. These articles are selected from over twenty years of *Glass Patterns Quarterly* archives.

www.GlassPatterns.com



Beads & Jewelry

For More Information Contact:  
Glass Patterns Quarterly, Inc.  
P.O. Box 69 • Westport, KY 40077  
502-222-5631  
Fax: 502-222-4527  
www.GlassPatterns.com  
E-mail: info@GlassPatterns.com

*Nothing stops Diann!*

 **OLYMPIC KILNS**  
[www.greatkilns.com](http://www.greatkilns.com)

Nothing stops Diann's creativity from flowing because she has the equipment to get any size project accomplished. Surrounded by Olympic kilns – big, small and in-between sizes – Diann knows she will get all of her customers' projects done, as well as her own.

Get your creativity flowing – visit us at [www.greatkilns.com](http://www.greatkilns.com) to find your kiln for fusing, casting, slumping and more.



Diann Reina, owner of Stained Glass Crafters Workbench, San Antonio, Texas. Visit [www.sgcbench.com](http://www.sgcbench.com) for glass art courses, custom glass work and supplies.

**OLYMPIC KILNS**

800-241-4400 • [www.greatkilns.com](http://www.greatkilns.com)

**EDCO** COPPER FOIL

**HOLDING IT TOGETHER FOR GENERATIONS TO COME!**

Look for the gold circle blue letters and it's in the bag.

- Excellent Quality
- Exact Tolerance
- Dead Soft Copper
- Best Tack and Adhesive
- Black Coated & Silver Coated
- Vinyl & Paper Sandblast Resist



- All copper foil can be cut 1/8" up to 35".
- Customer names can be printed on the bags of foil free of charge.
- All of our sandblast resist can be slit from 1/8" up to 24".
- Wider rolls of copper can be cut with craft shears for different designs.

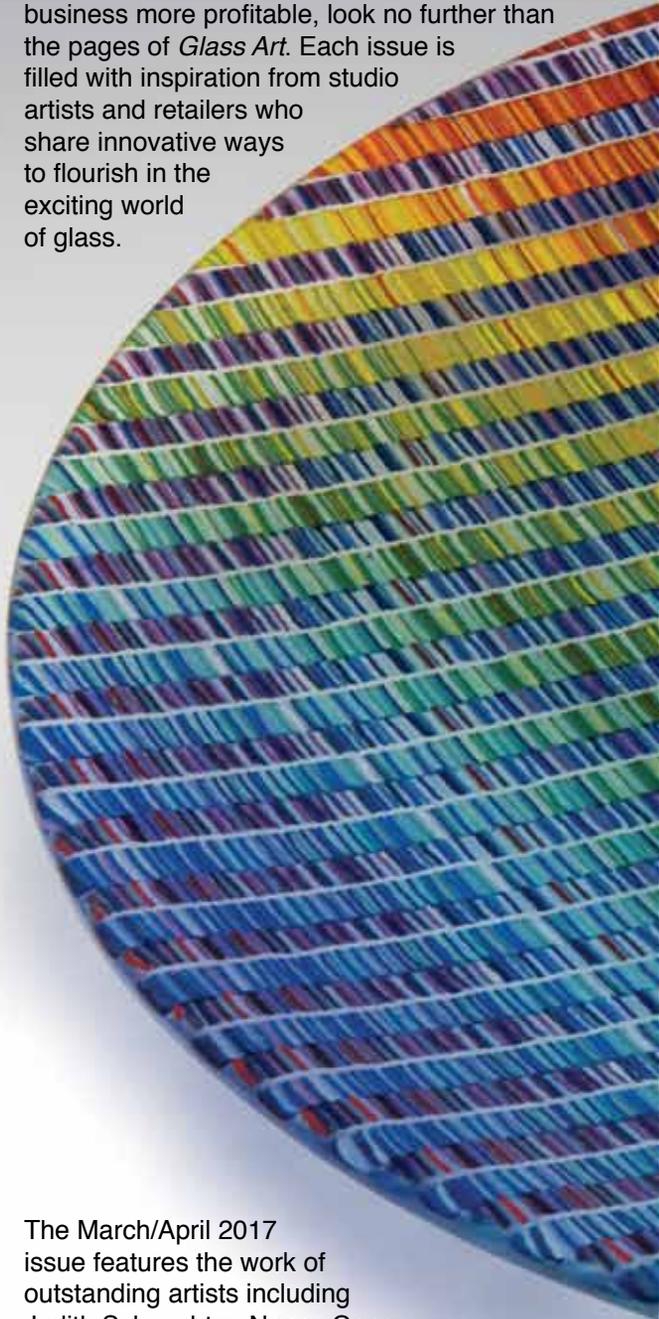
(866) 397-4777

(718) 788-8108

# GLASS ART

The Magazine for the Creative Professional  
Working in Hot, Warm, and Cold Glass

If you're searching for ways to make your glass art business more profitable, look no further than the pages of *Glass Art*. Each issue is filled with inspiration from studio artists and retailers who share innovative ways to flourish in the exciting world of glass.



The March/April 2017 issue features the work of outstanding artists including Judith Schaechter, Nancy Gong, Dana Boussard, and Richard Parrish, and so much more.

Visit [www.GlassArtMagazine.com](http://www.GlassArtMagazine.com) to subscribe today.

*Richard Parrish, Prismatic Tapestry Bowl detail.  
Photo by Jessie Moore.*

[www.GlassArtMagazine.com](http://www.GlassArtMagazine.com)

About the lowest temperature at which MUD can be fired is 1380°F. The hotter it is fired, up to 1550°F, the shinier and flatter it becomes, so you have a lot of options for how you want the finished design to appear. I want the matte look, keeping most of my texture.

## Firing Schedule

Segment 1: Ramp 750°F/hr to 1400°F and hold 10 min.  
Segment 2: Ramp 9999 (AFAP\*) to 850°F and hold 10 min.  
Segment 3: Ramp 9999 (AFAP\*) to 1000°F and hold 20 min.  
Segment 4: Ramp 9999 (AFAP\*) to 300°F and hold 5 min.  
\*as fast as possible

# 14

*Last but not least, create a spray of leaves, let dry, and fire using the same schedule as for step 13.*



I used 1962 Mint Green NT color to create some strokes with a 10/0 script liner brush, but any color of NT colors would work. Then a layer of Brass ACCENTS were applied over each of the leaves, one at a time, and allowed to dry so the color wouldn't run.

An additional possibility that isn't shown is to apply metal leafing over the whole design after firing for a beautiful, raised, textured design. My article on metal leafing, "Gilded Partridge in a Pear Tree," can be found in the Fall 2016 Holiday Issue of *Glass Patterns Quarterly*. There is also a great Glass Expert Webinar, *Texture, Dimension, and Color*, on my MUDDING techniques available from GPQ.

I hope this article has given you a lot of knowledge and inspiration to go beyond the actual technique shown. Let me encourage you to try these techniques and experiment yourself to discover all the things you can do with MUD.

**GPQ**



*Margot Clark is co-owner of Unique Glass Colors (UGC) along with Harold Clark and Saulius Jankauskas, MD. UGC manufactures kiln fired glass color and MUD so "working" at UGC involves lots of "playing" with color! Margot teaches art in all forms and mediums, but glass is her passion. She participates in local art exhibits, her work is in private collections worldwide, and she has works that are part of permanent museum collections.*



© Copyright 2017 by Glass Patterns Quarterly. All rights reserved.

# The Illustrated Word

in Stained Glass Patterns



Twenty-One  
Inspirational Patterns  
by Karen Stephenson

502-222-5631  
www.GlassPatterns.com

## For Fusing, Mosaics, Stained Glass

the Morton starting point will be the same!

1... Mini Surface Plus 2... Safety Break 3... Portable Glass Shop

Free training videos at  
[mortonglass.com](http://mortonglass.com)

Spend some time at [mortonglass.com](http://mortonglass.com). Check out the Portable Glass Shop eManual... the expanded instructions will have you up and running PDQ. Download projects, like this star at [mortonglass.com](http://mortonglass.com).

"Cutter Slide", now part of the Glass Shop. Call or email to update your unit. Use it right or left handed for better scores.



"SB01" Safety Break

2 Panel "SS02P" Mini Surface Plus

Panels Interlock

"FG01B" Portable Glass Shop

No "Fast Angles"? Call us... trade-up plans available!

Morton Glass Works

*Don't Do Glass Without It!*

Web - [www.mortonglass.com](http://www.mortonglass.com)

Email - [mgw@mortonglass.com](mailto:mgw@mortonglass.com)

Phone - 309-266-5712

## Fused Fantasies



Books now available from  
Glass Patterns Quarterly



Complete step-by-step fusing instructions!

502-222-5631  
[www.GlassPatterns.com](http://www.GlassPatterns.com)

More than 175,000 sold!

## The Taurus 3 Ring Saw should be your ring saw.

Craftsmen from around the world have made the Taurus 3 their first choice.

- We originated the ring saw and have 27 years of ring saw technology behind us.
- Seven different interchangeable blades are available, for easy and precise cutting through virtually any material. These long-lasting blades are produced by a unique 15-step manufacturing process.
- Built-in work light reveals every detail of what you're creating.
- Accessory kit available for making circles, 45 degree bevels, straight and special cuts.
- Unparalleled USA-based customer service.
- Full three-year warranty on saws, parts and workmanship.



**TAURUS 3**  
RING SAW



GEMINI SAW CO.

Saw snaps out of base for use as a hand-held unit!

GEMINI SAW COMPANY, INC. • 310-891-0288 • [www.geminisaw.com](http://www.geminisaw.com)

# Gallery Pendant

## Two Pendants in One

*Design, Fabrication, and Text by Susan McGarry*

If you need a fast gift, then this is the project for you. By using this unique sterling silver plated bail you can give two gifts in one. The glass is two-sided, and the bail has an opening to easily flip the glass to the second side or add an entirely new piece. The bail frames the glass perfectly, making it an elegant gift for someone you love or for yourself.

### DichroicInc.com

#036 Rainbow A Etched Pattern on Thin Dichroic Glass on Clear for Pendant Side A, 1" x 1"

Aurora Borealis Candy Apple Dichroic on Ripple for Pendant Side B, 1" x 1/2"

### Bullseye Glass Co.

#216 Light Cyan for Pendant Side B, 1" x 1/2"

#1101-0050 Clear Thin, 1" x 1"

#100-0050 Black Thin, 1" x 1"

### Artifill.com

GPSSS Sterling Silver Gallery Pendant Bail

### Tools and Materials

Taurus Ring Saw or Wet Tile Saw

Glass Cutter Breakers 6 Head Pins

Small Wire Cutters Small Round Nose Pliers

Variety of Beads and Crystals

Silver Chain Black Glassline Paint

Toothpick or Fine Paintbrush



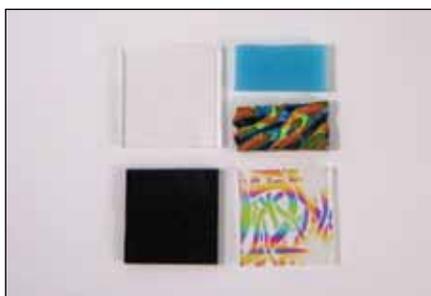
2

*Stack and fire the glass.*



1

*Cut all of the glass pieces.*



Cut the Light Cyan glass and the Cyan Red black-backed ripple glass each to 1" x 1/2". I like using ripple glass for this project, because it looks like the edge of ocean cliffs. It's not important that the 2 pieces match up perfectly, because the thin black glass under it will fill in any gaps during fusing. Cut the Thin Black, Thin Clear, and the Etched Pattern on the Thin Dichroic Glass on Clear each to 1" x 1".

The etched glass is perfect for this project. It has been coated with the dichroic coating before the pattern is etched into the glass. When it's fired face down, the pattern is highlighted.

Stack the glass pieces for the different layers as follows:  
*Bottom Layer:* Place the 1" x 1" etched pattern, dichroic glass down first, with the etched pattern on the bottom facing down and the clear side facing up.

*Layer 2:* Place the thin black on top of the etched glass.

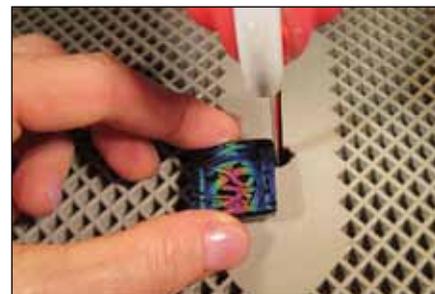
*Layer 3:* Place the opaque Light Cyan glass and the black-backed dichroic glass next.

*Top Layer:* Place the thin clear glass on top. You can use a drop of glue to hold the glass in place if you'd like, but it's not necessary.

Fire the glass to a full fuse by ramping 500°F per hour to 1460°F, then hold for 10 minutes. Cool to room temperature.

*Use the ring saw to trim the glass down to just under 1" x 1" to allow the glass to fit in the gallery pendant after the fire polish.*

3



Use the Glassline paint and a toothpick or fine paintbrush to add one or two birds in the Light Cyan section.

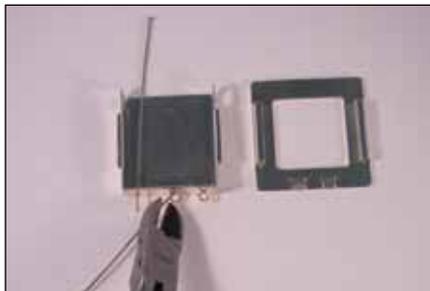
4



Place the glass back into the kiln, with the painted Light Cyan glass and the wavy dichroic glass face up, then fire-polish. Ramp 500°F per hour to 1360° and hold for 10 minutes, then cool to room temperature. Adjust the temperature given here to fire-polish in your own kiln as necessary. You want the glass to get just to the point of starting to look wet but not so hot or fired so long that you lose the square edges.

5

Add dangles to the gallery pendant.



Since the face is removable, it's easy to add the beaded dangles. Place one head pin through one of the three holes in the bottom of the gallery pendant. Create a loop with the round nose pliers and trim off the excess wire.

Repeat this on the other 2 holes. Use the 3 remaining head pins to make 3 beaded dangles with the crystals and beads. Make a loop in the top of the dangle using the round nose pliers and trim off the excess wire. Attach the dangles to the loops in the bottom of the gallery pendant.

6

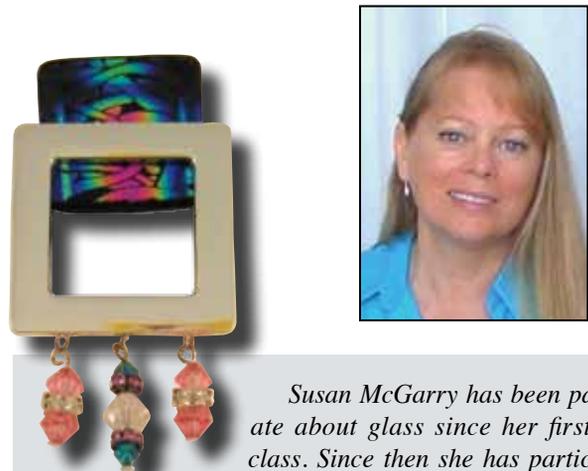
Assemble the gallery pendant.



Slide the front frame of the gallery pendant onto the pendant back. Slide the glass into place, then add a chain and it's done. When you are ready for a change, remove the chain, flip the glass over, and . . . Voilà! You have a new piece of jewelry.

This is a beautiful and easy pendant to make, and the results are gorgeous. Whether it's for yourself or a friend, you can make additional pieces of glass for each special occasion. **GPO**

© Copyright 2017 by Glass Patterns Quarterly. All rights reserved.



Susan McGarry has been passionate about glass since her first glass class. Since then she has participated in classes and workshops in fusing, frameworking, sculpture, and design. She has exhibited her fused glass jewelry and artwork in shops throughout the United States and Ireland. In 2012 she started her business ARTiFILL manufacturing molds and jewelry findings for artists and crafters.

Susan was born and raised in Southern California. Her home and glass studio are now in the San Francisco Bay area. She devotes all of her time to glass and shares her love of fused glass fractals in her classes. Her book, Fused Glass Jewelry, can be found on Amazon, and her molds and jewelry findings can be found at [www.artifill.com](http://www.artifill.com) or at local retailers.



**Artifill**  
Fine Products for Artists & Crafters

---

The Interchangeable Gallery Pendant





Create                      Insert                      Wear ...Repeat

Jewelry Findings \* Stainless Molds

Decals \* Books \* Videos

Kiln Supplies & More

**www.Artifill.com**




# Single Rose

Design by Jean Beaulieu, Text by Delynn Ellis



The rose is the most popular flower of all. A single pink rose is known as an elegant way of thanking someone. If you make this beauty in glass, your recipient will have endless years of enjoyment.

This stunning 10" x 9-1/2" design from Jean Beaulieu highlights the delicate striations of the Wissmach glass. Also consider this project for a mosaic glass panel by gluing and grouting the cut glass to a substrate, either for a wall hanging or tabletop art. Jean has also interpreted many of his glass designs into greeting cards for all occasions, which might present an added approach for your own creation.

This pattern was chosen from Jean's book, *Lovely Flowers, Illustrated Designs of Nature's Treasures*. The book contains 15 designs for the hobbyist or professional, as well as full-size patterns for panels and free-form projects. You can purchase the book online at [www.jeanbeaulieu.com](http://www.jeanbeaulieu.com). **GPO**

## Wissmach Glass Company

7-L Gold Pink/Opal/Crystal Light Opal for Flower Center, 1 Sq. Ft.

7-D Gold Pink/Opal/Crystal Dense Opal for Flower Center, Scrap

7-LL Gold Pink/Opal/Crystal Streaky for Flower, Scrap

191-D Medium Green/Opal/Crystal for Background, Scrap

23-L Light Green Opal/Copper Red for Leaf, Scrap

## Tools and Materials

7/32" Copper Foil Flux Solder

Black Patina 1/2" U-Channel Zinc

© Copyright 2017 by Glass Patterns Quarterly.  
All rights reserved.



Pattern Books  
by  
**The Vinery**

Full of great patterns  
for the beginner!

Available at your  
favorite retailer.

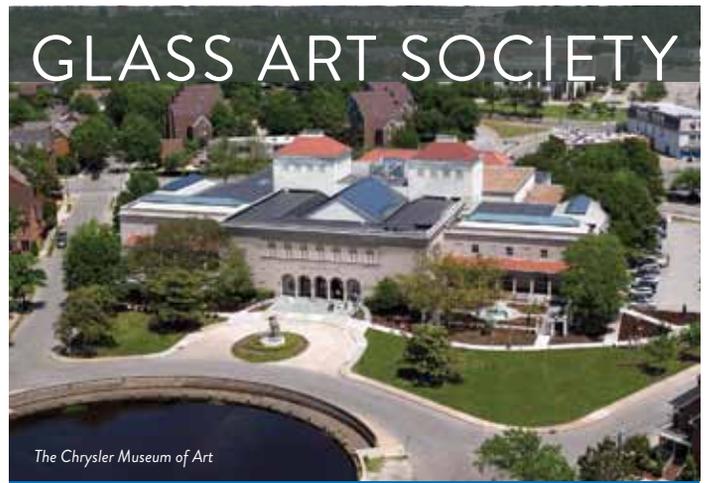
## Come and Visit Us at The Studio!

Where you'll find one of the largest selections  
of glass and supplies in the Midwest.

### The Vinery offers classes in:

- Stained Glass
- Fused Glass
- Mosaics
- Flameworking

**1422 MacArthur Rd.**  
**Madison, WI**  
**608-244-9900**



The Chrysler Museum of Art

## JOIN US in NORFOLK, VA

For the Glass Art Society conference, June 1-3, 2017  
*Reflections from the Edge: Glass, Art, and Performance*

The Chrysler Museum of Art and its Perry Glass Studio will host the 46th annual GAS conference. Attendees will experience glass demonstrations, lectures, and special events such as a local Gallery Hop, International Student Exhibition, Live and Silent Auction, and groundbreaking theatrical glass performances. **Conference registration opens December 1, 2016.**

VISIT [GLASSART.ORG](http://GLASSART.ORG) TODAY TO LEARN MORE  
ABOUT GAS MEMBERSHIP.



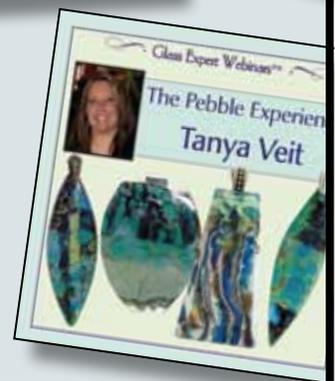
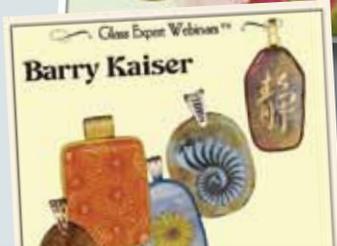
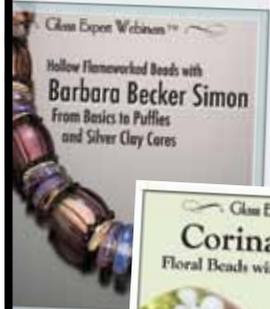
6512 - 23rd Ave NW, Suite 329, Seattle, WA 98117  
206.382.1305 [www.glassart.org](http://www.glassart.org) [info@glassart.org](mailto:info@glassart.org)

# Glass Expert Webinars™

Live Two-Hour Webinars with Renowned Glass Artists!

## No Traveling Required!

Participants from around the world are raving about the Webinars available from GPQ. In case you missed one, they are available as Data DVDs for viewing on computers and now some are available in Movie Versions that can be viewed on most DVD players.



Visit the Glass Expert Webinars™ link under  
“What’s New” at [www.GlassPatterns.com](http://www.GlassPatterns.com)  
for more details and local times.

# Florida Coasters and Night-Lights

## Creating Reverse Carving and Drape Molds with Kaiser Lee Board

*Design, Fabrication, and Text by Petra Kaiser*



There is so much you can do with just a little piece of Kaiser Lee Board (KLB), even create your own draping, slumping, and casting molds. KLB can also be engraved to provide interesting, embossed designs. We'll be using it here to make reversed kiln carving molds for creating coaster dishes and draping molds for night-lights.

### Coasters and Dishes

Since the bottom side of the glass will be the top of the coaster or dish when it's finished, these projects are ideal for use with Wissmach Luminescent™ coated glass. You can use any color glass you like. That's the idea behind the reverse fusing mold. You'll also notice that when you rest a glass on these coasters, you will not get any suction, and the condensed moisture will run off of the coaster.

This project is for those of you who would like to try Kaiser Lee Board but are afraid to cut into a big piece. Here is a way to practice some cutting and carving on a smaller scale.

### Wissmach Glass Company

Luminescent™ Coated Glass for Coasters, 4" x 4"  
96-17 Garden Green Luminescent™ for Night-Light, 4" x 4"  
Dichroic Glass for Decoration, Scrap  
White Opal Glass for Hiding the Light Fixture, Scrap

### Tools and Materials

Kaiser Lee Board, 4" x 4" x 1"  
Carving Tool Sanding Block  
Pencil, Pattern, or Template  
Kiln Wash Powder Nylon Stocking  
Night-Light Fixture Glue  
ThinFire Paper

1

*Make the carving tool from scrap glass.*



When you design a kiln carved coaster or dish, you need to make sure that your carvings are evenly deep all over the KLB. We made a little tool with scrap glass that has just the right width and a bigger piece in the back that acts as a stop for the depth of the carving.

Cut a strip of glass 1/2" wide and 6" long plus another strip that is 1/4" wide and 6 1/2" long. Place the second strip on top of the first and fuse them together. The bigger piece in the back acts as a stop to create the even depth that you need for carving.

2

*Use a putty knife to cut a piece of KLB into a 4" x 4" square.*



Here I have cut an 8" square of KLB into four 4" squares.

3

*Bevel the sides of the KLB with a sanding block about 1/4" all the way around.*



Hold a sanding block on an angle as you carve the sides of the KLB. It is important to do this before you add the design. Make sure you do not place the pattern too close to the edge.

4

*Transfer the design onto the KLB square.*



There are many ways to transfer a design onto the KLB. You can use a template or draw a design with a pencil directly onto the board. In our sample, we placed the printed logo on the board and transferred it with a needle.

Your design should not be bigger than 2.9", and it should not be too intricate. Here, for example, we used only the outer circle of the design plus the W, but not the inner circle or the small letters. You will be able to use the design elements countless times if the board between the design elements is at least 1/4" wide.

5

*Design the decor layer for your coaster and carve the design into the KLB with the carving tool.*



I'm a big fan of single layer glass dishes. These coasters look better, however, with a decor layer that can count as a second layer of glass. The second faux layer can be blue stripes on clear or pieces of other colors on a Clear Luminescent coated base layer. That makes this a nice project for using up some smaller pieces of glass from your glass remnant collection. You'll find some suggestions for additional design elements at the end of the tutorial.

Be careful to not place the carved lines too close to each other. You will be able to use the same design countless times if the original surface of the KLB between the design elements is at least 1/4" wide.

### Firing the Projects

Before you place your Wissmach Luminescent glass on the KLB mold with the coated side down, add some dry kiln wash powder or a piece of ThinFire paper on top of the mold. Fire using this suggested schedule. However, each kiln fires differently, so you might have to adjust it to allow for the way your own kiln fires.

- Segment 1: Ramp 900°F/hr to 1000°F and hold 10 min.
  - Segment 2: Ramp 9999 (AFAP\*) to 1430°F and hold 10 min.
  - Segment 3: Ramp 9999 (AFAP\*) to 950°F and hold 30 min.
  - Segment 4: Cool to room temperature
- \*as fast as possible

*Release Tip:* In order to get the best relief on your coaster or dish, I recommend that you use Primo Primer kiln wash. The Wissmach Luminescent coating does not act like a release on fiber paper in the same way that iridescent glass does.

Mix the first coat with 1 part primer to 6 parts water. The board will soak up the primer, so you will need to prefire the primer at 500°F. After firing, you can go over the mold with a thin solution of Primo Primer of 1 part primer to 8 parts water. Just let it dry and use it over and over again.

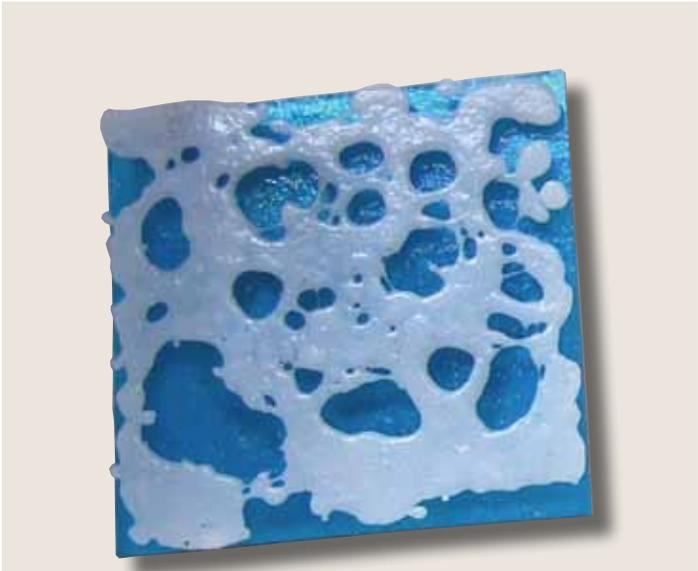
### Night-Lights

As you can see, even a little piece of KLB can have many functions. You can turn over the piece of KLB used for the coaster and make it into another coaster mold with a different design or carve it in a different way to create a Night-Light mold. The difference between the two molds is that the coaster mold is a "reverse" fusing mold, while the other is a regular slump/drape mold.

The reverse fusing molds are ideal for the Wissmach Luminescent glass, especially the opal and darker luminescent-coated types, where the luminescence does not shine up through the top. To keep the luminescent coating intact, it always has to be fired with the luminescent side down toward the mold or shelf. In a reverse fusing mold, you will turn over the fired piece to see the top. Therefore, your shiny side will be up.

The night-light shown here was made with Wissmach Garden Green Luminescent coated glass. To create a night-light mold, bevel only the left and the right sides of the Kaiser Lee Board and carve a design into it to add interest to the project.

*Important Note:* Make sure not to have any carvings in a place where you need to glue on the fixture. I like translucent glass for the night-light, but I fuse a strip of white opal in the back of the light to hide the fixture. **GPO**



### Additional Design Elements

You can prefuse some design elements to use with your coasters. Here are just a few ideas.

- **Make some thin vitrigraph stringers.** Be sure you use only thin stringers, so that your coaster won't wobble on the table. That is actually true for any design element you will be using, since the top side will be the bottom of the finished piece. If you haven't made vitrigraph stringers before, take a look at the chapter on page 84 of my book, *Fuse It*.
- **Create some "frit lace."** Place a 4" x 4" piece of shelf paper on your kiln shelf, place a 2 mm to 3 mm layer of fine frit on it, and fuse with only one segment: Ramp 9999 (as fast as possible) to 1430°F and hold for 10 minutes, turn off the kiln, and let the kiln cool naturally. Use the frit lace on a piece of lighter colored Luminescent such as Clear, Light Blue, Light Amber, or other similar colors.
- **Use a carved piece of KLB to create wavy glass elements.** Cut 1/4"-wide strips of glass and place them on a kiln wash-dusted, carved KLB mold. This technique also has only one firing segment, but this time take the temperature to only 1300°F. You can place these elements directly on the kiln floor, so I would recommend that you take your clay shelves out of the kiln and fire quickly

using this schedule: Ramp 9999 (as fast as possible) to 1300°F, hold for 10 minutes, turn off the kiln, and let it cool naturally.

- **Place some strips of glass on the back.** This is, of course, the easiest way to create a faux second layer. It also looks good if you use a piece of glass that is about 3" x 4" in any color you like, then cut that piece into 4" x 1/4" strips and place them with a small gap between them on top of the base piece.

*Petra Kaiser, internationally renowned kiln formed glass artist and instructor, has a distinctive style that captures Florida sun, light, and water in sculptures, functional glassware, and wearable designs. She is always drawn to 3-D sculptures and abstract shapes, and when first introduced to glass fusing in 1997, she found the available mold options rather limiting. This gave birth to Kaiser Lee Board, a perfect casting medium developed by Petra and husband Wolfgang, that is easy to cut and form into any shape for fusing molds.*



*Petra loves to teach and shares her cutting-edge techniques and designs with students in her Fuse It Studio and all over the world, and is a regular instructor at the Glass Craft & Bead Expo, BIG Arts, and Edison State College. She has also shared her innovative ideas in three books from Wardell Publications as well as through numerous articles in various international glass magazines. Visit [www.kaiserlee.com](http://www.kaiserlee.com) to learn more about Petra's glass art and workshops.*

© Copyright 2017  
by Glass Patterns Quarterly.  
All rights reserved.



**HANDY HANGER**  
"The handiest little hanger for all your metal-framed panels and small fused glass art"

*Ask For It By Name  
At Your Favorite  
STAINED GLASS STORE!*

New Instructional Video on Our Website  
[www.HandyHanger.net](http://www.HandyHanger.net)



# Ruby-Throated Hummingbird

*Design by Ann Madsen, Text by Darlene Welch*

**H**ummingbirds are one of the most fascinating birds around, and birdwatchers count it good fortune to catch sight of these delightful creatures. Some are so small that if one flies by, it's hard to tell whether you've seen a small bird or a large insect. Ann Madsen captures this little fellow perfectly in this 9" x 10" panel as he feeds from the flower's nectar. Using copper wire for the plant stems allows the design elements to live in the open space inside the panel's border, adding a feeling of depth to the panel, as if the bird is actually hovering close by.

The ruby-throated hummingbird is just one of many species of these sought-after birds. With a little research or just sheer imagination, you can change the colors of the bird and flower to let your creativity soar and make this project your very own. **GPO**



## **Wissmach Glass Company**

*All design pieces cut from scrap glass*

25-LL Orange/Green/Opal/Crystal for Flower

100-SP Dark Green/Opal for Leaves

2-D Yellow/Opal/Crystal for Beak

16 Copper Red for Throat

243-LL Dark Blue/Yellow Green for Bird Body and Head

WO-702 Medium Green/Dark Blue for Tail and Head

197-L Dark Blue/Medium Green/Opal/Crystal for Wings

256-L Pastel Green/Blue/Red for Border

161 Salem Green for Border Corners

## **Tools and Materials**

7/32" Copper Foil Flux Solder

Black Patina 1/4" U-Channel Zinc

Copper Wire Sheet Foil

© Copyright 2017 by Glass Patterns Quarterly.  
All rights reserved.

# Designing Dandelions with Stringers

*Design, Fabrication, and Text by Marcia Fox*

The image of dandelion seeds blowing in the wind is a sure sign that spring is here. While dandelions aren't always a welcome sight as they randomly pop up in gardens and sidewalk cracks, their yellow beauty and seed spreading phenomenon are images that are better fused in glass than popping up in your lawn.

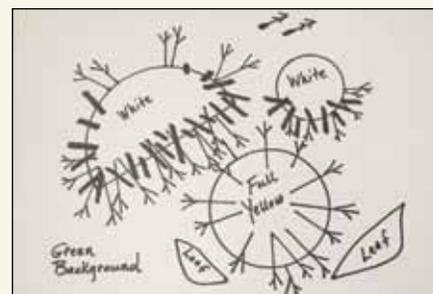
Having recently retired after working the past forty years as a registered nurse, I contemplated how I was going to fill up my days, how to keep myself busy. Already an established artist in the community, I was looking for something new and creative when I unexpectedly discovered the art of stained glass.

The variety of glass, texture, and patterns was overwhelming at first, and trying to decide what to create was difficult. There is an endless amount of ideas to try. After making many stained glass pieces, my interest changed direction and my focus turned to fusing.

Being an oil/acrylic painter, I found that fusing wasn't much different. The artist must come up with a good composition and create an original design. I explored different groups on Facebook and Pinterest and found beautiful creations by different artists that influenced me in making this design. I've also discovered that including stringers in a design is fun and exciting.



1



*Design your composition.*

The design I chose consists of one yellow dandelion and two white dandelions with seeds that are ready to fly. Don't be afraid, however, to experiment and create your own design.

Cut the Spectrum PAPHYROS Kiln Shelf Paper to fit the kiln shelf and continue to create your piece step by step until you are happy with the design. This project will stay on the kiln shelf until it is completed before removing it.

## **System 96®**

220-76SF Dark Green Opalescent for Background, 12" x 13"

60-93-96 Rootbeer/Cream Specialty Sheet Glass  
for Dandelion Bases, Scrap

Various Shades of Green, Brown, and Ivory  
for Frit Balls, Scrap

Yellow and White Stringers

Yellow, Brown, White, Ivory, and Clear Frit Balls

White, Yellow, and Green Frit

## **Tools and Materials**

Spectrum PAPHYROS® Kiln Shelf Paper

Basic Glass Cutting Tools    Frit Making Tools

GlasTac Fuser's Glue    Toothpicks

2

*Gather all of the glass, tools, and supplies together.*



Cut a 12" x 13" piece of 220-76SF System 96 Dark Green Opalescent glass for the background and select the 96 COE scrap in your choice of greens, browns, and ivory. You will also need a variety of frit balls plus yellow and white stringers, as well as white and yellow frit.

3

*Create your own frit balls or purchase what you need for the panel.*



You can purchase premade frit balls, which come in a variety of sizes and colors, but you can also make your own, which is easy to do. Just take a variety of colors of scrap glass and cut the scrap into small squares. You can also use pieces of course frit if you have that.

Place the glass pieces in your kiln on the Spectrum PAPYROS Kiln Shelf Paper, making sure that there is space around each piece. Fire the glass using the Frit Ball Firing Schedule at the end of the tutorial. When you open the kiln, you will find rounded pieces of glass with a small flat spot where they were touching the kiln shelf.

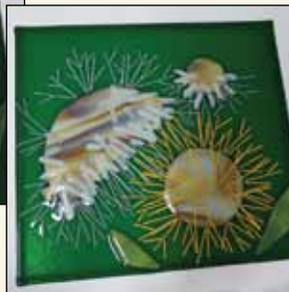
4

*Cut out the two circles and one larger half circle from the Rootbeer/Cream glass.*



5

*Create the inner base layer of the dandelions by using a variety of different colors and lengths of scrap 96 COE glass and stringer.*



For the first layer of glass on top of the background, there are two white dandelions. After breaking the stringers that will be used to add the petals and seed fluff for them to the desired length, lay this lowest layer of stringers flat along the edges of the circles on the dandelions.

Do the same for the yellow dandelion, which is still in the compact flower stage, using yellow stringer instead of white. Since it is still fully bloomed, also add a few yellow stringers on top of the circle. Position the two green leaves cut from scrap glass near the bottom of the panel.

Carefully put a few drops of GlasTac Fuser's Glue over the stringers and let the glue dry. This will enable the GlasTac to do its job, which is to prevent any movement of the stringers when they are placed in the kiln. Full-fuse this lowest layer of the panel to create the base for your composition using the firing schedule at the end of the tutorial.

6

*After the full fuse is completed, add additional stringer and frit balls to build up the design.*



For the next layer, add more stringers to create petals on top of the dandelions. Also add frit balls to represent seeds flying in the wind and place different colored frit balls on each dandelion as well. Overlap more stringers on top of the already fully fused stringers and begin to bring the stringers more into the dandelion, breaking them off to a shorter length.

By using drops of Glastac on the glass, you can easily move the stringers around with a toothpick to the desired location. Place the project in the kiln and fire to a contour fuse using the suggested schedule at the end of the tutorial.

7

*Apply a final layering of stringers, especially on the yellow dandelion in the center, for a fuller effect.*



Add more white and yellow stringers on all of the dandelions plus shorter yellow stringers for the center of the yellow dandelion. Sprinkle Yellow and White Transparent Glass Frit Medium over various areas of the dandelion stringers to finish off the dandelions.

# Celebrating Women in Glass

Join *The Flow* magazine for its 12th Annual Women in Glass issue. This Winter 2016 edition presents fresh, new tutorials plus an expansive gallery featuring the work of 160 exceptional female artists who provide an exciting look at today's innovative flameworked glass.



Christi Klein

With each issue of *The Flow*, flameworking artists will find inspiration and information on ways to take their glass art to a higher level. Visit the "Subscriptions" link under "Store" at [www.theflowmagazine.com](http://www.theflowmagazine.com) to keep up with the latest techniques and begin a great glass adventure with *The Flow*.

# 8

Add the vein details to the leaves with dark green stringers before firing the panel to a final contour fuse.



The suggested firing schedule can be found at the end of the tutorial. Once you're finished making this panel, I hope you will use what you've learned here to create your own design. **GPO**

## Firing Schedules

The following schedules were developed using an Evenheat Rampmaster Model RM3 Kiln. Remember that every kiln fires differently, so you may need to adjust the schedules to fit your own kiln.

### Full Fuse Schedule

Segment 1: Ramp 300°F/hr to 1150°F and hold 30 min.  
Segment 2: Ramp 300°F/hr to 1420°F and hold 10 min.  
Segment 3: Ramp 9999 (AFAP\*) to 950°F and hold 45 min.  
Segment 4: Ramp 125°F/hr to 700°F and no hold.  
\*as fast as possible

### Contour Fuse Schedule

Segment 1: Ramp 350°F/hr to 1150°F and hold 30 min.  
Segment 2: Ramp 300°F/hr to 1290°F and hold 10 min.  
Segment 3: Ramp 9999 (AFAP\*) to 950°F and hold 45 min.  
Segment 4: Ramp 125°F/hr to 700°F and no hold.  
\*as fast as possible

### Frit Ball Schedule

Ramp to 1490°F and hold 14 min., then cool.

Having graduated from Bradley University, Peoria with a bachelor of science in nursing, Marcia Fox was able to retire after working as a registered nurse. She discovered art glass in 2013 and has enjoyed stained glass and fusing ever since. Her art consists of private commissions, which can be found throughout the country, oil and acrylic paintings, portraits, landscapes, and pet portraits.



Marcia has studied with various well-known artists. She enjoys traveling and painting with her art friends and is an active member of The Left Bank Art League in Moline, Illinois, and The Civic Art Center in Galesburg, Illinois. The artist and her husband have two married children and three wonderful grandchildren. They enjoy the country life, florals, antiquing, and traveling the country in their RV with their two goldendoodles.

© Copyright 2017 by Glass Patterns Quarterly.  
All rights reserved.

# Lake Superior Shoreline

Design by Mary Harris, Text by Darlene Welch



Of the five bodies of water known as the Great Lakes, which are situated along the eastern half of the border between the United States and Canada, Lake Superior is by far the largest. Considered to be the largest lake in the world by surface area, it is bordered by the province of Ontario, Canada, to the north and by the states of Minnesota, Wisconsin, and Michigan to the south. Henry Wadsworth Longfellow referred to it as “Gitche Gumee” in his famous poem, *The Song of Hiawatha*, after the name given to it by the Ojibwe that meant “be a great sea.”

Inspired by a photograph sent to her by one of her clients, Mary Harris has captured the beautiful and often rugged shoreline of Lake Superior in this 30" x 18" stained glass panel. Careful selection and placement of the glass color and grain help to create the look of depth and realism for the rocks, trees, and water. This and other designs by Mary can be found at [www.bestglasspatterns.com](http://www.bestglasspatterns.com). **GPO**

## Wissmach Glass Company

503-L Light Opal/Dark Gray/Brown for Rocks, 1/2 Sq. Ft.

503-D Dense Opal/Dark Gray/Brown for Rocks, 1/2 Sq. Ft.

502-L Opal/Medium Gray/Brown for Rocks, 1/2 Sq. Ft.

119-LL Cobalt Blue/Light Opal/Crystal for Water, 3 Sq. Ft.

118-D Cobalt Blue/Opal/Crystal for Water, 1/2 Sq. Ft.

257-L Medium Purple/Sky Blue/Light Amber/Opal/Crystal for Sky, 4 Sq. Ft.

115-LL Dark Purple/Green Opalescent for Trees, 1 Sq. Ft.

WO-57 Medium Green/Opal/Crystal Wispy for Bushes, 2 Sq. Ft.

WO-59 Dark Brown/Green/Opal/Crystal for Bushes, 2 Sq. Ft.

100-L Dark Green/Opal for Trees, 4 Sq. Ft.

WO-112 Dark Green/Dark Amber/Opal/Crystal Wispy for Background Landscape, 1 Sq. Ft.

78-D Medium Amber/Green/Opal/Crystal for Background Trees, 1 Sq. Ft.

58-D Medium Amber/Opal/Crystal for Background Trees, 1 Sq. Ft.

## Tools and Materials

7/32" Copper Foil Flux Solder

Black Patina 1/2" U-Channel Zinc

© Copyright 2017 by Glass Patterns Quarterly.  
All rights reserved.

**ARIZONA**

**The Stained Glass Shop**

6232 W Bell Rd Ste 101  
Glendale, AZ 85308  
602-504-0553  
www.stainedglass-shop.com

**Tumbleweed Stained Glass**

2636 W Baseline Rd  
Mesa, AZ 85202  
888-261-7091  
www.TumbleweedStainedGlass.com

**Kachina Stained Glass**

1762 S Greenfield Rd  
Mesa, AZ 85206  
480-655-2000  
www.kachinastainedglass.com

**CALIFORNIA**

**Stained Glass of Marin**

1001 Mirabella Ave  
Novato, CA 94945  
415-893-9000

**COLORADO**

**The Dragons Cache**

1109 7th St  
Greeley, CO 80631  
970-353-1051

**CONNECTICUT**

**The Stained Glass Apple**

496 Glen Brook Rd  
Stamford, CT 06906  
203-358-8700

**FLORIDA**

**Glassic Arts Stained Glass**

320 S Spring Garden Ave Ste E  
Deland, FL 32720  
386-738-1008  
www.glassicarts.net

**McMow Art Glass**

701 N Dixie Hwy  
Lake Worth, FL 33460  
561-585-9011  
www.mcmow.com

**Art Glass Design Studio**

1329 S 14th St  
Leesburg, FL 34748  
352-365-6699

**D & L Stained Glass Inc**

2625 N Harbor City Blvd (US 1)  
Melbourne, FL 32935  
321-242-6017  
www.DLSGLASS.com

**Stained Glass For Less**

2755 Vista Parkway Ste 1-9  
West Palm Beach, FL 32935  
561-557-7713 / 844-SGF-LESS  
www.stainedglassforless.com

**IDAHO**

**Legacy Glass Art**

6431 W Fairview Ave  
Boise, ID 83704  
208-336-3040  
www.LegacyGlassArt.com

**ILLINOIS**

**Suevel Studios**

870 S Arthur Ave  
Arlington Heights, IL 60005  
224-735-2376  
www.suevelstudios.com

**Art Glass Studio of Belleville**

1600 East A St  
Belleville, IL 62221  
618-235-9638

**O'Reilly's Stained Glass**

58 N William St  
Downtown Crystal Lake, IL 60014  
815-444-1797  
www.oreillysstainedglass.com

**Victorian House**

408 E Main St  
Mahomet, IL 61853  
217-586-4834

**INDIANA**

**The OP Shop**

**Kokomo Opalescent Glass Co**  
1310 S Market St  
Kokomo, IN 46902  
765-457-1829  
www.kog.com

**KANSAS**

**Rayer's Bearden**

**Stained Glass Supply**  
6205 W Kellogg Dr  
Wichita, KS 67209  
800-228-4101  
www.rayersinc.com

**LOUISIANA**

**Carousel Stained Glass**

1602 Eastwood  
Slidell, LA 70458  
985-643-2515  
*Email: carouselglass@bellsouth.net*

**MAINE**

**Prism Works**

555 Portland Rd  
Bridgton, ME 04009  
207-647-8322

**Phoenix Studio**

630 Forest Ave  
Portland, ME 04101  
800-773-4154  
www.phoenixstudio.com

**Treehouse Glass Studio**

12 Murch Rd  
Sebago, ME 04029  
207-787-3626

**MARYLAND****Timeless Tiffany**

1769 W Pulaski Hwy  
Elkton, MD 21921  
410-287-3900  
www.timelesstiffany.com

**Anything in Stained Glass**

5104 Pegasus Ct Ste F  
Frederick, MD 21704-8323  
800-462-1209  
www.anythinginstainedglass.com

**Glass by Grammy**

4733 Snow Hill Rd  
Salisbury, MD 21804  
410-548-2589  
www.glassbygrammy.com

**MASSACHUSETTS****The Stained Glass Emporium**

69 Fall River Ave Rt 6  
Rehoboth, MA 02769  
508-336-5455  
karensge@comcast.net  
www.stainedglassemporium.net

**MICHIGAN****Straits Area Glass Co**

10994 N Straits Hwy  
Cheboygan, MI 49721  
231-627-4426

**Delphi Creativity Center**

3380 E Jolly Rd  
Lansing, MI 48910  
800-248-2048  
www.delphiglass.com  
*Free color catalog*  
*150+ classes - see schedule online*

**Lansing Art Glass**

2320 E Michigan Ave  
Lansing, MI 48912  
517-484-8875

**Stallings Stained Glass**

8011 Miller Rd  
Swartz Creek, MI 48473  
810-630-9103  
www.stallingsglass.com

**Linden Art Glass**

37655 Ford Road  
Westland, MI 48185  
734-728-7767

**MINNESOTA****Flamingo Glass**

205 W Lincoln Ave  
Fergus Falls, MN 56537  
www.flamingoglass.com

**Glass Endeavors**

2716 E 31<sup>st</sup> St  
Minneapolis, MN 55406  
612-721-9553  
www.glassendeavors.com

**Michael's Stained Glass Studio**

720 Osseo Ave S  
St Cloud, MN 56301  
800-250-2330 (MN only)  
www.michaelsstainedglass.com

**Sleepy Eye Stained Glass**

135 Main St E  
Sleepy Eye, MN 56085  
507-794-6449  
www.sestainedglass.com

**MISSISSIPPI****Seraphim Studios LLC**

104 S 10th Ave  
Hattiesburg, MS 39401  
601-550-4137  
www.seraphimglass.com

**MISSOURI****Stained Glass Station**

236 NW Oldham Pkwy  
Lees Summit, MO 64081  
816-525-8088  
www.stainedglassteacher.com  
*Classes, Extensive selection of glass, supplies, and fusing*

**NEVADA****Glass Art Studio Inc**

4310 Cameron St #3  
Las Vegas, NV 89103  
702-227-9794  
www.glassartinclv.com

**NORTH CAROLINA****The Glass Angel**

224 E Front St  
Burlington, NC 27215  
336-227-1231  
*Full line of supplies and classes*  
www.theglassangel.com

**Mystical Reflections Stained Glass**

9974 Traders Lane  
Calabash, NC 28467  
910-575-3503  
www.firedup4glass.com

**OHIO****Leaded Glass Design**

1755 State Rd  
Cuyahoga Falls, OH 44223  
330-929-4514  
www.leadeditglassdesign.com

**Glass Creations**

6786 State Route 128  
Miami town, OH 45041  
513-353-4455

**TENNESSEE**

**Fountain City Stained Glass LLC**

1328 Buchanan Ave  
Knoxville, TN 37917  
865-688-3333

Email: [fountaincitystainedglass@comcast.net](mailto:fountaincitystainedglass@comcast.net)

**TEXAS**

**Blue Moon Glassworks**

108 W 43<sup>rd</sup> St  
Austin, TX 78751  
512-380-0770  
[www.austinbluemoon.com](http://www.austinbluemoon.com)

**Merry Go Round  
Stained Glass Center**

3021 Lackland Rd  
Fort Worth, TX 76116  
817-763-0589  
[www.merry-go-roundstainedglass.com](http://www.merry-go-roundstainedglass.com)

**Stained Glass Crafters Workbench**

7515 Eckhart Rd  
San Antonio, TX 78240  
210-647-7475  
[www.sgcworkbench.com](http://www.sgcworkbench.com)

**VIRGINIA**

**Laurel Gallery**

2805 Hungary Rd  
Richmond, VA 23228  
804-672-6804  
[www.laurelgallery.net](http://www.laurelgallery.net)

**Bluebird Stained Glass Studio**

2163 Jefferson Davis Hwy #103  
Stafford, VA 22554  
540-720-4296  
[www.bluebirdstainedglass.com](http://www.bluebirdstainedglass.com)

**WASHINGTON**

**Glass Expressions**

648 SW 152nd  
Burien, WA 98166  
206-242-2860

**WISCONSIN**

**The Glass Garden LLC**

25 W Milwaukee St  
Janesville, WI 53548  
608-754-3718  
[www.eglassgarden.com](http://www.eglassgarden.com)

**The Vinery**

1422 MacArthur Rd  
Madison, WI 53714  
608-271-2490  
[www.vineryglass.com](http://www.vineryglass.com)

**Hearts Desire Stained Glass and Beads**

234 A Marina Ct  
Waterford, WI 53185  
262-763-6733  
[www.heartsdesirestainedglass.com](http://www.heartsdesirestainedglass.com)

**CANADA**

*Alphabetically arranged by  
province, city, then store name*

**Glass Expressions**

2925 Comox Road  
Courtenay, BC Canada V9N 3P7  
250-339-7739

**Cranberry Stained Glass**

102 Chain Lake Dr  
Vantage Point 1A  
Halifax, NS Canada B3S 1A7  
902-876-5167 / 866-377-5167  
[www.cranberrystainedglass.com](http://www.cranberrystainedglass.com)

**Huronia Art Glass**

680 Bay View Dr Unit 3  
Barrie, ON Canada L4N 9A6  
705-721-1323  
[www.huroniaartglass.com](http://www.huroniaartglass.com)

**Artistry in Glass**

#105 - 1674 Hyde Park Rd  
London, ON Canada N6H 5L7  
519-641-0443 / 877-386-1116  
[www.artistryinglass.on.ca](http://www.artistryinglass.on.ca)

**Glasscraft**

159 Broadway  
Orangeville, ON Canada L9W 1K2  
519-941-2505  
[www.glasscraftcanada.ca](http://www.glasscraftcanada.ca)

**Canadian Stained Glass Warehouse**

1017 3<sup>rd</sup> Ave  
Quebec City, QC Canada G1L 2X3  
418-648-0969  
[www.canadianstainedglasswarehouse.com](http://www.canadianstainedglasswarehouse.com)



**Advertise Your Shop In  
GPQ's Stained and  
Glass Art  
Supply Shops Directory**

Our retail directory is an affordable means of advertising your storefront to potential new customers. You can advertise your store hours, special events, new classes, and website.

Join others who have gifted their favorite instructor and storefront by purchasing a directory listing. In doing so, you can help secure their business success. Contact us to find out how your store can be included.

**Call 1-502-222-5631.**

# Kiln Corner

## Kiln Wash Basics

by Arnold Howard

Photography Courtesy  
of Paragon Industries, L.P.

*Though Arnold Howard works for Paragon Industries, L.P., the information here applies to all brands of glass kilns. Feel free to send questions for this column no matter what brand of kiln you own.*

**H**ot glass can embed into bare kiln shelves. Since kiln wash, also called glass separator, does not melt at high temperatures, it forms a protective barrier between kiln shelves, the firebrick kiln bottom, and glass.

### How do you avoid bubbles when applying kiln wash to shelves?

Before applying kiln wash, heat the shelves in the kiln to around 150°F/65°C for an hour or two. (Separate the shelves in the kiln with posts.) Kiln wash flows smoothly onto warm shelves without forming small bubbles. Preheating shelves also speeds drying and lessens the chance of cracking the kiln wash.

Let the kiln wash dry before firing the kiln. The kiln washed shelves are still wet if they are cool to the touch.

### Should kiln wash be sprayed or brushed onto the kiln floor?

We don't recommend spraying kiln wash onto the firebrick floor. That is because airborne kiln wash particles could land in an element groove, burning out an element. Instead, brush the kiln wash on with a hair brush or paint brush.

Coating the firebrick floor or kiln shelf should take only a few minutes, because you don't have to let the kiln wash dry completely between coats. Brush on the kiln wash, allow it to dry for a few minutes, then brush on the next coat.

### Is it ever necessary to recoat the kiln bottom with kiln wash? If so, how often? The kiln wash on the shelf deteriorates pretty quickly.

The kiln wash adheres to the firebricks better than it does to shelves, because the firebricks are porous. Therefore, it is rarely necessary to apply more kiln wash after the first application when the kiln is new. Apply more kiln wash to bare areas after removing glass that has stuck to the firebrick bottom.

### I live in an apartment. Does a kiln normally produce unpleasant smells during firing?

Glass alone does not produce a strong odor, but paints or decals fired onto glass and shelf paper under the glass produce odors. Because of the shelf paper odor, I prefer kiln wash, which is odorless.

### I have come to realize that some cracking of glass during slumping is due to being too close to the heating elements. For tall pieces, I gain over an inch of height by removing the kiln shelf and posts from under the slumping mold. Do I still need to use kiln wash?

A shelf offers partial protection to the kiln bottom from a glass overfire. You can certainly slump glass into a mold without a shelf. However, you should coat the firebrick bottom with kiln wash if you're not using a shelf.

### Glaze has eaten into a shelf, and scraping the glaze off the shelf has left a low spot. Can the shelf be repaired?

Yes, in some cases. Coat the shelf with kiln wash. Apply several coats to the low area where you removed the melted glaze. The kiln wash will fill in the depression. However, this is only a temporary repair.

**GPO**



*Start the brush stroke an inch or so from the edge of the shelf and work toward the opposite side. This avoids buildup of kiln wash on the edges.*



*If glass sticks to the shelf, scrape it off with a putty knife at a sharp angle. Wear safety glasses, since sometimes chipped glass becomes airborne.*

*Arnold Howard writes instruction manuals and advertisements for Paragon Industries, L.P. His hobbies are glass fusing and karate. He also enjoys studying history and watching classic movies. You can reach Arnold at [ahoward@paragonweb.com](mailto:ahoward@paragonweb.com) with questions for future columns. Sign up for his kiln newsletter at [www.paragonweb.com](http://www.paragonweb.com).*

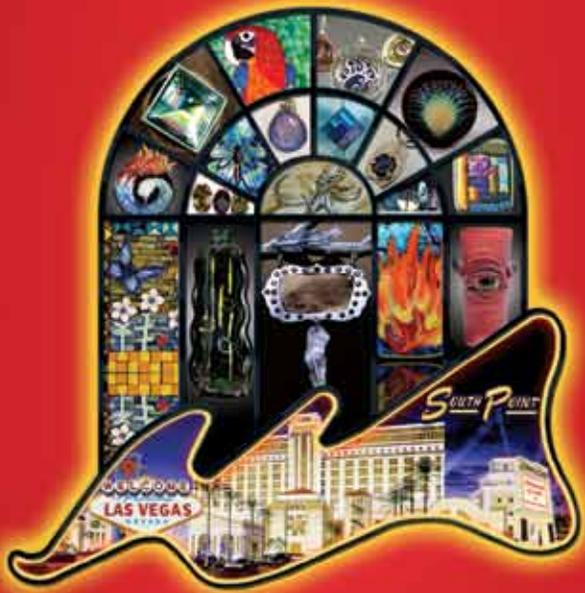
© Copyright 2017 by Glass Patterns Quarterly.  
All rights reserved.

# GLASS CRAFT & BEAD EXPO

— MARCH 29 - APRIL 2, 2017 —

**CLASSES**  
MARCH 29 -  
APRIL 2

**EXHIBITS**  
MARCH 31 -  
APRIL 2



March 28th - April 2nd



Will join us at the

**South Point Hotel & Casino**  
9777 LAS VEGAS BLVD.  
LAS VEGAS, NV 89183

**SIGN UP FOR OUR MAILING LIST NOW!**

**WWW.GLASSCRAFTEXPO.COM**

## Advertisers' Index

Advertiser	Contact Info	Page
AAE Glass	www.aeeglass.com	29
Aanraku	(650) 372-0527 www.abasg.com	9
Anything in Stained Glass	(800) 462-1209 www.anythinginstainedglass.com	14
ArtiFill	www.Artifill.com	63
Covington Engineering Corp.	(877) 793-6636 www.covington-engineering.com	23
Cress Manufacturing	(800) 423-4584 www.cresskilns.com	79
D & L Art Glass Supply	(800) 525-0940 www.dlartglass.com	21
Edco Supply Corporation	(866) 397-4777 edcofloridawest@aol.com	59
Evenheat Kiln, Inc.	(989) 856-2281 www.evenheat-kiln.com	17
Firelite Forms	(888) 800-3901 www.fireliteforms.com	54
Flight Into Fantasy	Ask Your Local Supplier	55
Franklin Art Glass	(800) 848-7683 www.franklinartglass.com	17
Flow, The	(502) 222-5631 www.TheFlowMagazine.com	72
Fused Fantasies	(502) 222-5631 www.GlassPatterns.com	61
Gemini	(310) 891-0288 www.geminisaw.com	61
Glass Accessories International	www.glassaccessories.com	15
Glass Art	(502) 222-5631 www.GlassArtMagazine.com	23/28/60
Glass Art Society	(206) 382-1305 www.glassart.org	65
Glass Craft & Bead Expo	(800) 217-4527 www.glasscraftexpo.com	25/78
Glass Expert Webinars™	(502) 222-5631 www.GlassPatterns.com	53/65
Glass Patterns Quarterly	(502) 222-5631 www.GlassPatterns.com	59
Glass Quest	(561) 585-9011 www.Glassquest2017.eventbrite.com	8
Glastar	(800) 423-5635 www.glastar.com	15
Gryphon Corporation	(818) 890-7770 www.gryphoncorp.com	21
Hakko USA	www.HakkoUSA.com	5
Handy Hanger	www.HandyHanger.net	68
His Glassworks, Inc.	(828) 254-2559 www.hisglassworks.com	17
Illustrated Word, The	(502) 222-5631 www.GlassPatterns.com	61
ISGB	(812) 222-2243 www.isgb.org	29
KWC, LLC Table Foiler	(800) 250-1790 www.tablefoiler.com	21
Lisa Vogt	(608) 271-2490 www.LisaVogt.net	54
Morton Glass Works	(800) 635-2113 www.mortonglass.com	61
Olympic Kilns	(800) 241-4400 www.greatkilns.com	59
Paned Expressions Studios	(410) 676-1248 www.panedexpressions.com	15/17
Paragon Industries	(800) 876-4328 www.paragonweb.com	13
Paul Wissmach Glass Co., Inc.	(304) 337-2253 www.wissmachglass.com	80
SGAA	(800) 438-9581 www.stainedglass.org	52
Skutt Kilns	(503) 774-6000 www.skutt.com	2
Unique Glass Colors	(407) 261-0900 www.uniqueglasscolors.com	29
Whittemore-Durgin	(800) 262-1790 www.whittemoredurgin.com	55
Vinery, The	(608) 244-9900 www.vineryglass.com	65



Introducing...

# THE LATEST INNOVATION IN KILN TECHNOLOGY

## THE **GK SERIES** | **GLASS KILNS** By: *Cress Manufacturing*

PROFESSIONALS AND HOBBYISTS ALIKE ARE ENTHUSIASTIC ABOUT THE EASE AND SAFETY OF MANIPULATING HOT GLASS IN THE NEW GK SERIES DROP BOTTOM KILNS



NOW  
AVAILABLE  
IN TWO  
CONVENIENT  
SIZES

*Minimal heat loss and fast temperature recovery for virtually any firing project*

- Jewelry
- Raking
- Enameling
- Raku
- Slumping
- Vitrograph
- Low-Fire Ceramics

Model	Volts	Amps	Max Temp	Chamber Opening	Outside Dimensions	Fuse Size	Wire Size	Ship Weight
GK1	120	15	2000°	8"x8"x6.75" H	15.5"x14.5"x17.5" H	20	12	70
GK2	240/208	18/16	2000°	12"x12"x9" H	25"x25"x39" H	20	10	180

CALL TODAY FOR YOUR CLOSEST DEALER AND A FREE CATALOG  
800.423.4584 | 775.884.2777 | WWW.CRESSMFG.COM

# Get Lucky! ...

with **WISSMACH GLASS**



**A WINNING SELECTION OF STYLES AND COLORS  
FOR ALL YOUR ART GLASS NEEDS**

PO Box 228, Paden City, WV 26159-0228 Tel: (304) 337-2253 Fax: (304) 337-8800 [www.wissmachglass.com](http://www.wissmachglass.com)

"Poker Faces", by Peter McGrain, 36" x 36", traditional stained glass, made entirely of Wissmach glass. ©2005 P.McG.