



#### Taking Care

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#### Guidelines

### TIME CAPSULES

#### ARCHIVAL PROTECTION

***Suggestions on how to make a time capsule, where to buy one, what to put in it, and conditions that can help preserve it. Guidelines vary depending on the amount of time intended that the objects are to be in the time capsule, i.e., the longer in the capsule the more stringent the precautions.***

#### Construction

Use a strong, waterproof enclosure that can be sealed tightly to keep out air and water. Canisters can be made of copper, aluminum, stainless steel or large diameter polyethylene pipe. Sheet metal fabricators can make stainless steel cylinders. A metal time capsule ideally should be seamless although it could also be welded. The capsule should be sealed with a screw-cap with a gasket, although it could also be welded shut. A time capsule should not be soft soldered as solder can deteriorate in the ground allowing water to enter the capsule.

End-caps on large diameter polyethylene pipe can be heat-sealed; threads in caps can be filled with thin Teflon tape. Polyethylene may become permeable to moisture as it ages, so it must be encased in a waterproof enclosure if buried in the ground.

Do not use polyvinyl chloride (PVC) pipe for time capsules: some of its chemical components are naturally unstable and break down in a process that cannot be reversed and will release acids into the canister.

Companies that manufacture time capsules are:

### **A-1 Time Capsules**

WorkPro Inc.  
1345 East Lemon Avenue  
Bradbury, CA 91010  
(818) 301-0208  
FAX (818) 359-1818

### **Affordable Time Capsules**

P.O. Box 690  
Concord, CA 94522-0690  
E-Mail: [Info@affordabletimecapsules.com](mailto:Info@affordabletimecapsules.com);  
[websales@affordabletimecapsules.com](mailto:websales@affordabletimecapsules.com)

### **AMALCO**

230 Sheffield Street  
Mountainside, NJ 07092  
(201) 233-3500

### **Egg2K**

3336 Harvard Street  
Santa Ana, CA 92704  
(714) 545-1077  
ATTN: Joy Palmer

### **Erie Landmark**

4449 Brookfield  
Chantilly, VA 22021-1642  
(800) 874-7848

### **4TimeCapsules**

PO Box 3417  
San Diego, CA 92163-3417

### **Future Archaeology**

PO Box 1130  
Ansonia Station  
New York, NY 10023  
(212) 877-4310  
E-mail: [info@FutureArchaeology.com](mailto:info@FutureArchaeology.com)

### **Future Packaging & Preservation LLC**

1580 West San Bernardino Road, Suite C  
Covina, CA 91722-3457  
(800) 786-6627; (626) 966-1955  
FAX (626) 966-5779  
E-mail: [info@futurepkg.com](mailto:info@futurepkg.com)  
Also has a series of pamphlets and publications on  
time capsules, suggestions for contents, and their  
preservation; archival supplies.

### **Future Tube**

PO Box 991108  
Redding, CA 96099-1108  
(800) 637-9086  
FAX (530) 245-0997  
E-mail: [tubber@futuretube.com](mailto:tubber@futuretube.com)

**Millera Company**

PO Box 411  
Wilton, CT 06897  
(203) 762-5949  
E-mail: [info@millera.com](mailto:info@millera.com)

**Nicholas Faulkner Associates**

Hecton House, East Sutton, Nr. Maidstone  
Kent ME17 3EA  
United Kingdom  
T/F: 01622 844644  
E-mail: [timemaker@timecapsulesuk.com](mailto:timemaker@timecapsulesuk.com)

**SSP International Inc.**

PO Box 412067  
Los Angeles, CA 90041  
(213) 254-4948/258-2240

**Time Capsule 2000**

Division of Barr Technologies, Inc.  
2995 Whipporwill Drive  
Morgan Hill, CA 95037  
(408) 779-2345

**Time Capsules, Inc.**

*West of the Mississippi:*

PO Box 650  
Nampa, ID 8712  
(208) 466-8712  
ATTN: Jim Kusterer

*East of the Mississippi:*

RD#1 121  
107 Bauder School Road  
Prospect, PA 16052  
(800) 527-7853  
ATTN: [Tom Marak](#)

Prices start at around \$400 and go up according to the size of the time capsule.

**Time Capsules, Inc.**

PO Box 1393  
Spring, TX 77383  
(800) 717-TIME  
E-mail: [TimeFuture@aol.com](mailto:TimeFuture@aol.com)

## **Safe and Unsafe Materials**

Electronics are a problem. If you include video or audio tapes or compact disks, the equipment to play them back may not be available when the time capsule is opened. Furthermore, the tapes or disks may have deteriorated. Include instructions on any intended playback equipment. For computer tapes, add a written copy of the software, and identify the computer type.

Polyvinyl acetate (PVAC) or PVC, including plastic food wrap, will deteriorate even in a sealed capsule and release acetic acid and hydrochloric acid, respectively, as they age.

In general, properly processed, fiber-based, black-and-white photographic prints, preferably treated with gold, selenium or poly-sulfide toner, keep best. Photographic films coated on a polyester base rather than an acetate base are more stable. Color prints and slides can fade even when kept in the dark.

Newsprint is acidic and deteriorates easily. A local museum or library should have names of paper conservators. The alternative is to make photocopies on archival quality paper (high-alpha cellulose) with an alkaline reserve of pH 7.5-8.0.

Objects made of rubber should not be placed in time capsules since rubber deteriorates over time, releasing sulfur.

All wood, especially oak, gives off acid vapors and must be sealed away from electronic equipment or metal articles, especially those made of lead, or lead-containing alloys, in the time capsule.

Textiles should be clean and insect free. Characteristics of fibers that might be used in a time capsule:

- Cotton: Acts as a humidity buffer if temperature changes.
- Polyester: Stable.
- Silk: May deteriorate in oxygen atmosphere.
- Wool and Hair: Contain sulfur; may outgas and corrode metal.

## **Favorable Conditions**

Prepare contents to be placed in the time capsule in a cool, dry environment. Silica gel will help to buffer the humidity in the capsule. It is sold in granular form in art supply stores, hardware stores, and some department store closet shops. It must be conditioned to a low humidity level before use. ART-SORB, a more costly but easy-to-use form of silica gel is available from conservation suppliers.

Argon or nitrogen gas may be introduced into the capsule to replace oxygen. Bottled gas companies can supply these gases.

The product "Ageless" is sealed in a packet that is oxygen permeable. This product locks up oxygen that might leak into the capsule. It should not be used until just before sealing the container and should not be placed near heat-sensitive items. "Ageless" is available from conservation suppliers.

The capsule's location should be dry. A time capsule going into the ground may be placed inside a burial vault for added protection, or coated with asphalt- or pitch-impregnated fabric to keep out water.

If the capsule will be in a cornerstone, the location should be northerly or otherwise sheltered from extreme fluctuations in temperature caused by sun heating. If possible, the location should be vibration-free.

A complete list describing color and material of every object should be included since objects can change over time.

### **References:**

[American Institute for Conservation of Historic & Artistic Works \(AIC\)](#)

1717 K Street, N.W., Suite 200

Washington, DC 20006

(202) 452-9545

FAX (202) 452-9328

E-mail: [info@aic-faic.org](mailto:info@aic-faic.org)

Can provide referrals for art conservators.

[Art-Care.com](#)

1-866-ART-4455 (1-866-278-4455)

E-mail: [info@art-care.com](mailto:info@art-care.com)

Art-Care is the online art service community making professional conservation, appraisal, and other

services available to anyone who owns an art object of value.

Sometimes that value is monetary, sometimes it is purely sentimental.

SCMRE's [Teaching with Time Capsules](#).

A detailed pamphlet on time capsules, [CCI Notes 1/6](#) is available from the [Canadian Conservation Institute](#), 1030 Innes Road, Ottawa, ON K1A 0M8, Canada, (613) 998-3721, FAX (613) 998-4721. [Also available are some Notes on Time Capsules by R.L. Barclay.]

The pamphlet [Time Capsules, the do's and don'ts](#) is available from: [Conservation Resources \(U.K.\) LTD.](#), Units 1,2 & 4 Pony Road, Horsepath Industrial Estate, Cowley, Oxford OX4 2nd England, 001865-747755, FAX 01865-747035.

[International Time Capsule Society \(ITCS\)](#)

c/o Oglethorpe University  
4484 Peachtree Road  
Atlanta, GA 30319-2797  
(404) 261-1441  
FAX (404) 364-8500

Seeks: To maintain a registry of all known time capsules; to establish a clearing house for information about time capsules; to encourage study of the history, variety, and motivation behind time capsule projects; and, to educate the general public and the academic community concerning the value of time capsules.

Caney, Steven. [Make Your Own Time Capsule](#), 1990, New York: Workman Pub.

Fraser, Helen. [The Time Capsule: Repository of the Past or Romantic Notion?](#) AASLH Technical Leaflet #182, 1992. Available from the [American Association for State and Local History](#), 530 Church Street, Suite 60, Nashville, TN 37219-2325.

Iowa Conservation and Preservation Consortium, [So you want to do a time capsule? Tips to Keep in Mind While Trying to Defeat Time](#) by Ivan Hanthorn, Preservation Department Head, Iowa State University Library

Keepsafe Systems. [Time Capsules](#).

Minnesota Historical Society. [Building a Time Capsule](#):

## Guidelines for Preserving Materials.

Old -House Journal Restoration Directory, updated annually.

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